United States Senate
PERMANENT SUBCOMMITTEE ON INVESTIGATIONS
Committee on Homeland Security and Governmental Affairs

Carl Levin, Chairman
John McCain, Ranking Minority Member

E X H I B I T S

Part 1 of 4 (Exhibits 1-20)

Hearing On

ABUSE OF STRUCTURED FINANCIAL PRODUCTS: Misusing Basket Options to Avoid Taxes and Leverage Limits

July 22, 2014

199 Russell Senate Office Building, Washington, D.C. 20510

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EXHIBIT LIST

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ABUSE OF STRUCTURED FINANCIAL PRODUCTS: Misusing Basket Options to Avoid Taxes and Leverage Limits

July 22, 2014

1. a. *The Fiction of Independence,* charts prepared by the Permanent Subcommittee on Investigations.
   b. *Rentec Control of Palomino*, quotes taken from 6/24/2009 Barclays Memorandum to PwC. [BARCLAYS-PSI-139757-766, at 763-764, Exhibit #53, below.]
   c. *Medallion Master Funds* [RT-PSI-00363694]
   d. *Signatories to Franconia-Rentec Investment Advisory Agreement* [RT-PSI-0396355, Exhibit #6, below.]
   Signatories to Mosel Limited Partnership Agreement [RT-PSI-00396411-412, Exhibit #8, below.]
   Signatories to Bass-Rentec Investment Advisory Agreement [RT-PSI-00396321, Exhibit #35, below.]
   Signatories to Badger Holdings Ltd. Partnership Agreement [RT-PSI-00396313-314, Exhibit #4, below.]

2. Internal Revenue Service Generic Legal Advice Memorandum (GLAM), released November 12, 2010, re: *Hedge Fund Basket Option Contracts (The contract does not function like an option, and should not be treated as such.)*. [BARCLAYS-PSI-748148-158]

Documents Related to Renaissance Technologies (RenTec):

3. RenTec email, dated September 2008, re: *Re-shuffle- Follow-up (I confirmed that there is no prohibition against end-of-day transfers in our new MAPS documentation. We may reshuffle the constituents of the underlying options at the end of the day, at the current closing price. * * * Mark Silver was going* [to] *discuss with you the ability to optimize the end of day re-shuffle process in order to keep the number of position re-shuffles to a manageable amount and below the radar of DB.)*. [RT-PSI-00068362]

4. RenTec/Deutsche Bank email, dated November 2008, re: *DB counteroffer (Daniel Koranyi wrote: ... Colin points out that the Optimal Execution paper supports our contention that any portfolio they would find themselves having to liquidate would be low-risk, and could be liquidated slowly if required. The portfolio would be well diversified, market-neutral, and with low liquidity imbalance....)*. [RT-PSI-00368695-697]

5. RenTec email, dated August 2011, re: *US portfolio shift - overrides? (Management has decided to shift some portfolio from the Palomino loss-protected managed account to the Deutsche (DBAG) loss-protected managed accounts. The total amount of portfolio to shift, for now, is USD 4e9.)*. [RT-PSI-00364418]

Documents Related to MAPS Transactions:

6. *Investment Advisory Agreement* between Renaissance Technologies Corp. and Franconia Equities Ltd., dated March 30, 2000. *(Advisor is authorized, without further approval by or notice to the Client, to make all investment decisions concerning the Account....)* [RT-PSI-00396351-355]

7. *Barrier Option Transaction* confirmation, dated March 14, 2012, between Deutsche Bank AG, London Branch and Franconia Equities Ltd. *(Buyer has made an independent judgment of the experience and expertise of the Investment Advisor. *** Other than as provided above, Buyer agrees that it shall not contact directly the Investment Advisor regarding the terms or subject matter of this Transaction.)*. [DB-PSI 00123196-208]

8. *Mosel Equities L.P., Limited Partnership Agreement*, dated October 26, 2007. *([T]he General Partner shall have complete and exclusive responsibility for managing and administering the affairs of the Partnership, and shall have the power and authority to do all things necessary or proper to carry out its duties hereunder.)* [RT-PSI-00396394-413]

9. *Amended &Restated Investment Advisory Agreement*, dated November 16, 2007, between Deutsche Bank AG London and Renaissance Technologies LLC. [RT-PSI-00000914-931]

10. RenTec/Deutsche Bank email, dated December 2007, re: *Buy Back Request (We've been unable to maintain a borrow to fully cover your following short position. Please confirm your willingness to buy this position back as we're exposed to being bought in (any cost/short sale fines will be passed on)*[.] *Due to the illiquidity of this stock at present I must also ask you not to short any more.)*. [RT-PSI-00004630-632]

11. RenTec/Deutsche Bank email, dated February 2008, re: *UK MAPS (However, what you described faced some general objection where DB could be argued to have been effectively fronting for an unregulated fund.... Not thought to be a good idea then and following the Soc. Gen. fiasco I imagine there would be even more twitching now.*). [RT-PSI-00062957-959]

12. *Deutsche Bank Maps: New Process/Procedures As of May 15, 2008 (Portfolio rebalancing due to Option Exercise *** Rentec Fund Operations group will reallocate the positions in the sub-account underlying the exercised option to the remaining options based on their relative cash settlement amounts....).* [RT-PSI-00002319-322]

13. RenTec/Deutsche Bank email, dated June 2008, re: *Language (Staggering options: You wish to staffer options once every 3 months. My suggestion is that you stagger options by NAV also, so there is at least 6 points in NAV difference between different options.)*. [RT-PSI-00054256-257]

14. Deutsche Bank email, dated June 2008, re: *What we need coded on PEAS apart from guidelines (The anticipated leverage amt is not randomly chosen. It is chosen so that the funding cost (which we will call the "optionality value") on the long side.... ...is between 20-25% of the initial premium (100 in the above).* [DB-PSI 00010767-769]

15. *Managed Account Products, Option Account Profile, DBAG MAPS Rentech Mosel Equities LP Option Account 1*, dated June 24, 2008. [DB-PSI 00001599]

16. Deutsche Bank email, dated June 2008, re: *Tentative: MAPS Working Group... (...if one option is near breaching the barrier and they* [RenTec] *want to reallocate trades from that options to others that are at capacity while still being under the 33bn GMV* [Gross Market Value] *threshold. Based on prior conversations they want to keep their flexibility around allocations.)*. [DB-PSI 00025033-034]

17. GWA/Deutsche Bank email, dated July 2008, re: *George Weiss MAPS Investment Guidelines - PLEASE READ (Please transfer all the positions mentioned in Rule 11 and Rule 12 to OGI account from the MAPS account *** He will be able to do the crosses reqeusted under Rule 11 & Rule 12 in the AM).* [GWALLC-PSI-0002504-505]

18. RenTec/Deutsche Bank email, dated July 2008, re: *Optionality Value (While this formula will give a desired result at the current interest levels, as interest rates increase (and we could potentially require a longer dated option) the Optionality Value could get prohibitively high even to the point of exceeding the total amount of premium. I played around with other formulas but still came up against the same conundrum)*. [RT-PSI-00046119-121]

19. Excerpt of *Deutsche Bank, GPF Business Development, CTB Program Portfolio, September 2008. (The object of this initiative is to provide a New Multiple MAPS structure that will more closely resemble a traditional options structure – premium risk.)*. [DB-PSI 00116157-160, 177]

20. GWA email, dated October 2008, re: *db maps account inbalance (just got a call from db claiming we have too much net long exposure in maps and want just to bring the portfolio back within 5% exposure within a week ... maybe we can cross some position over to ybs next week)*. [GWALLC-PSI-0002328]

21. Deutsche Bank/RenTec email, dated October 2008, re: *DB-Rentec - Response to Issues Discussed on 10/16 (In any event, expanding this to 20 Exchange Business Days does not work from a tax standpoint. 20 Exchange Business Days to make a termination decision under a 13-month options tilts the balance strongly in favor of viewing the accrual of this termination right into the effective conversion of the option into an American style option.)*. [DB-PSI 00079017-021]

22. a. Excerpt of transcript of telephone conversation on November 7, 2008, between Satish Ramakrishna and William Broeksmit (Mr. Ramakrishna*: [S]o that's the way option is supposed to work ... this is structured as an option because* Mr. Broeksmit: *Yeah for tax reasons* Mr. Ramakrishna: *For tax reason but the ... option make it clear that the premium is only ... commitment that the option holder has)*. [DB-PSI 00122458]

    b. Excerpt of transcript of telephone conversation on November 6, 2008, between Peter Brown and Satish Ramakrishna ([T]*he models don't see the government intervention but we do and we are nervous that something could happen. ... So we have actually intervened and we do that from time to time when things like this happen*.). [DB-PSI 00122457]

23. RenTec/Deutsche Bank email, dated December 2008, re: *Test of representations (It will be operationally feasible for DB to create Designed Positions, both by not executing transactions directed by the Advisor and by unwinding or liquidating Effected Positions without the direction of the Advisor.)*. [RT-PSI-00236253-258]

24. *Master Investment Advisory Agreement*, dated December 15, 2008, between Deutsche Bank AG London and Renaissance Technologies LLC (*...supervise and direct the investment and reinvestment of all assets in the Account, and engage in such transactions on behalf of the Client's Account, in the Advisor's discretion and without prior consultation with the Client, subject only to the terms of this Agreement, in any and all forms of securities or other property....)* [DB-PSI-00000001-047]

25. Deutsche Bank/GWA email, dated February 2009, re: *MAPs comments (Loss of the cross collateralization (ability to borrow against the excess equity) of the option. Historically, we have been able to fund the operating expenses of our business by borrowing against the excess equity value of the option.)*. [DB-PSI 00033762-765]

26. Deutsche Bank email, dated August 2009, re: *RenTech MAPS (If client started the day with maximum leverage (it has never done so), longs would have to underperform shorts by 11% to burn through capital and put us into non-recourse loss territory. We have triggers in place that allow us to seize control of the portfolio at any point during the day if half of the capital is depleted (ie, 5.5% long underperformance of shorts).)*. [DB-PSI 00006983-984]

27. *Barrier Option Transaction* confirmation, October 8, 2009, between Deutsche Bank AG, London Branch and Mosel Equities L.P. *(Buyer has made an independent judgment of the experience and expertise of the Investment Advisor. Buyer agrees that it shall not attempt to direct or influence the choice of investments in the Basket.)*. [DB-PSI 00000181-209]

28. Deutsche Bank/GWA email, dated October 2009, re: *DB Options - possible new developments (...codification of the economic substance doctrine which, if enacted, could have serious implications with respect to the DB option transaction.)*.
[DB-PSI 00036241-244]

29. Deutsche Bank/GWA email, dated October 2009, re: *DB/Weiss MAPS option (Cross selling: DB will not allow Weiss to cross sell positions held in the DB account to other prime brokers in connection with its routine rebalancing activities.)*.
[DB-PSI 00036700-701]

30. Deutsche Bank email, dated November 2009, re: *Rentec Mosel EurOption #4 (Problem is they were targeting the 7X Init Leverage again but that only gets us to a 16.6% Optionality Val. We either need 8.45X Init Leverage or Libor + 133bps Term Rate?????)*.
[DB-PSI 00008625-627]

31. Deutsche Bank email, dated February 2012, re: *Two Sigma Follow-up (Non-recourse financing is one option (MAPS is just a name for that)....)*. [DB-PSI 00045265-266]

32. Deutsche Bank email, dated September 2011, re: *quick summary on Rentec (Im hoping you have a rough idea of the situation re the MAPS trades. In order to resolve the question of*[:] *- Owner of option controlling the entire underlying - Option (really the earliest version) looks like a margin account*[.] *I was thinking of using a CPPI like structure*[.]*)*.
[DP-PSI 00112132-133]

33. Deutsche Bank email, dated November 2011, re: *Rentec (That's the result of having a real option.)*. [DB-PSI 00112522-523]

34. Deutsche bank email, dated December 2011, re: *Rentec confirm and IMAs (Please see below the changes to the Rentec confirm suggested by U.S. tax. I note that some of these changes are in response to changes suggested by Rentecs counsel, Winston & Strawn. I have not been privy to such communications. I trust you have been involved.)*.
[DB-PSI 00020740-748]

Documents Related to COLT Transactions:

35. *Investment Advisory Agreement* between Renaissance Technologies Corp. and Bass Equities Ltd., dated September 1, 2002. *(Advisor is authorized, without further approval by or notice to the Client, to make all investment decisions concerning the Account....)*
[RT-PSI-00396318-321]

36. Barclays *Project Colt, New Product Proposal*, dated May 28, 2002, *(COLT provides an after tax benefit to these investors through the conversion of their return from the fund from short term capital gains (taxed at 39.6%) to long term capital gains (taxed at 20%).).*
[BARCLAYS-PSI-212544-557]

37. Correspondence between Barclays and Financial Services Authority re: *PROJECT COLT*, dated July 4, August 16, September 5, and September 13, 2002. [BARCLAYS-PSI-005241-243, 255-257, 260-261, and 258-259]

38. Barclays Memo, dated August 22, 2002, re: *SCM* [Structured Capital Markets] *Approvals paper - Project COLT (COLT provides an after tax benefit to these investors [RenTec] through the conversion of their return from the fund from short term capital gains (taxed at 39.6%) to long term capital gains (taxed at 20%). This would be achieved by substituting the Fund's direct execution of its trading strategy with the cash settled call option over a Barclays proprietary account whose performance substantially replicates the Fund's trading strategy.).* [BARCLAYS-PSI-212590-598]

39. Letter Agreement, dated September 30, 2002, between Barclays Bank PLC and Bass Equities Ltd. (COLT Transaction). [BARCLAYS-PSI-212918-932]

40. Barclays Memo, dated April 4, 2003, re: *SCM Approvals paper - Project COLT (Renaissance II) (Palomino will not have any credit risk or market risk in the transaction, due to the fact that ... its PB account is hedged by the Synthetic Call Option and Prime Brokerage effectively has taken the downside risk. The risk borne by Prime Brokerage is akin to the risks taken in a normal collateralised* [sic] *Prime Brokerage relationship.)*. [BARCLAYS-PSI-213947-953]

41. *Badger Holdings L.P., Limited Partnership Agreement*, dated August 17, 2004. *(*[T]*he General Partner shall have complete and exclusive responsibility for managing and administering the affairs of the Partnership, and shall have the power and authority to do all things necessary or proper to carry out its duties hereunder.)* [RT-PSI-00396296-315]

42. Barclays Capital Memo to SCM Approvals Committee, dated September 3, 2004, re: *Approvals paper – COLT V: Renaissance Restructuring (The risk borne by Prime Brokerage is akin to the risks taken in a normal collateralised* [sic] *Prime Brokerage relationship, where the risks generally are confined to catastrophic losses occurring over a short period of time.)*. [BARCLAYS-PSI-004161-165]

43. *Indemnity Agreement*, dated October 1, 2004, among Barclays Bank PLC, Palomino Limited, Badger Holdings L.P., Medallion International Limited, Medallion Capital Investments Ltd., Medallion Associates L.P., Medallion Fund L.P., and Medallion RMP Fund L.P. [BARCLAYS-PSI-632877-904]

44. Letter Agreement, dated December 21, 2005, between Barclays Bank PLC and Palomino Limited (COLT Transaction). [BARCLAYS-PSI-002879-896]

45. *Investment Management Agreement*, effective October 1, 2004, between Palomino Limited and Renaissance Technologies Corporation *(*[T]*he Manager shall have full discretion and authority, without obtaining the Client's prior approval, to manage the investment and trading of the Accounts....]*. [BARCLAYS-PSI-574664-686]

46. Barclays email, dated April 2009, re: *June Balance sheet targets (Rentec wasn't comfortable with directly signing off on the deconsolidation, as they didn't view this to be their problem. They are now considering a proposal to include some new language in their investment management document which would require them to sign off should we seek to reconsolidate at a later date.)*. [BARCLAYS-PSI-025382-383]

47. Barclays email, dated April 2009, re: *Colt (Marty Malloy spoke with RenTec today and they have indicated that they are fine with the proposal in principle, although they apparently mentioned that their tax counsel would also be putting together a letter agreement of some kind for us to review in the next couple days.)*. [BARCLAYS-PSI-588643]

48. Barclays email, dated April 2009, re: *Palomino letter,* attaching April 29, 2009 letter from Renaissance Technologies to Barclays Bank re: Palomino Limited Investment Management Agreement. *(Please find the attached letter highlighting our concerns and representations that Renaissance would like Barclays to make in connection with the changes you are contemplating for Palomino.)*. [BARCLAYS-PSI-326572-575]

49. Barclays/RenTec email, dated May 2009 *(My guys have some comment on the letter and would like to discuss with our lawyers and Ed.)*. [BARCLAYS-PSI-285585-586]

50. Barclays/PwC email, dated May 2009, re: *Palomino to PwC 20/5/09 (...set up for the benefit of Renaissance, who are exposed to the majority of risks and reward.)*. [BARCLAYS-PSI-328074-077]

51. Barclays email, dated June 2009, re: *Project COLT - articles amendment (...restrict the activities of Palomino to those it is currently engaged in under the COLT transaction.)*. [BARCLAYS-PSI-577747]

52. Rentec/Barclays/Winston Strawn/OrrickHerrington/WalkersGlobal/ email, dated June 2009, re: *Palomino Limited - side letter* (with attachments). [RT-PSI-00361844-847, RT-PSI-00361879-881, RT-PSI-00235499-500]

53. Barclays Capital Memo, dated June 24, 2009, re: Palomino Limited *(RenTec controls the major activities of Palomino and is exposed to substantially all significant risks and rewards arising from the activities carried out through the PB Accounts, being the only permitted activities of Palomino. Consequently, under IAS 27.13 and SIC 12, BBPLC should de-consolidate Palomino from the date these proposed amendments are effective because they give rise to a loss of control (IAS 27.32).)*. [BARCLAYS-PSI-139757-766]

54. Barclays email and Memo, dated June 2009, re: *Project COLT - Orphan Note (It has been agreed with BarCap Finance and PricewaterhouseCoopers ("PwC") that, following proposed amendments to Palomino's memorandum and articles of association (the "Articles") and the giving of a covenant by Barclays, as sole shareholder of Palomino, that it will not seek to amend the Articles in the future without the consent of Renaissance Technologies LLC ("RenTec"), Barclays will cease to consolidate Palomino under IFRS.)*. [BARCLAYS-PSI-026163-165]

55. Renaissance Technologies LLC letters, both dated June 26, 2009, re: *Palomino Limited (Barclays hereby further covenants to Renaissance that it shall not make any amendments or modifications to the Memorandum and Articles of Association of Palomino after the date hereof without first obtaining the prior written consent thereto of Renaissance.)*. [RT-PSI-00236651-655 and 00236914-918]

56. Letter Agreement, dated June 26, 2009, between Barclays Banks PLC, Badger Holdings L.P, Renaissance Technologies LLC and Palomino Limited. [BARCLAYS-PSI-730031-032]

57. *The Companies Laws ... Memorandum and Articles of Association of Palomino Limited*, dated June 26, 2009. [RT-PSI-00234974-998]

58. Barclays emailed, dated June 2010, re: *Renaissance*, attaching *Barclays Capital, Portfolio Analysis of Renaissance Portfolios, CRA,* dated June 2010. [BARCLAYS-PSI-330659-682]

59. Barclays email, dated May 2010, re: *COLT XIX - Draft SCM Approvals Notification (The options reference the value of these PB* [Prime Brokerage] *accounts, which is equivalent to them referencing the assets directly, and therefore there is no leakage between the value of the assets ... and the value of the options. Thus, the net effect is that Barclays is extending senior financing to RenTec.)*. [BARCLAYS-PSI-010082-083]

60. Barclays email, dated November 2010, re: *Privileged - Colt (This* [the GLAM] *is a detailed write up of Colt concluding it doesn't work. We can discuss on MDs* [managing directors] *call but I intend to reach out to RenTec and Ed Cohen this morning to make sure they are aware. We will also confirm it does not impact Barclays. The only issue for Barclays I could see is some deemed wht* [withholding] *agent issue as the memo concludes that RenTec are the legal owner of the stocks. To me this would signal that IRS is inevitably going to litigate Colt.)*. [BARCLAYS-PSI-748506-507]

61. Barclays Memo to SCM US Approvals Committee, dated October 3, 2012, re: *COLT XXVII (The tax risk is assumed by the Client. The New Option Transaction does not meaningfully increase Barclays' reputation risk in relation to the Option Transactions, because writing a new option (or exercising an existing one) should be viewed as the maintenance of a longstanding structure.).* [BARCLAYS-PSI-016946-947]

62. Barclays Memo to Tax Risk Committee, dated October 3, 2012: re: *COLT (There is a reputation risk for Barclays, especially if the matter proceeds to court and the IRS's challenge and Barclays' role become publicly disclosed.)*. [BARCLAYS-PSI-016951-952]

63. Barclays email, dated October 2012, re: *COLT SCM Transaction/Important (The SCM US Approvals Committee recently approved an option transaction in which US tax reputation risk is an issue, and the Committee has engaged in the Tax Risk Committee on the transaction.)*. [BARCLAYS-PSI-748590]

64. Barclays Memo to Tax Risk Committee, dated October 12, 2012, re: *COLT (This memo explains the background to an investment structure which has been in place for 10 years and explains why, notwithstanding the publicity risk that Barclays is subject to as a witness to the case if the Client proceeds to litigate in court, we believe it remains an appropriate transaction for Barclays to be a party to.)*. [BARCLAYS-PSI-018114-116]

65. Barclays Memo to SMC US Approvals Committee, dated November 2012, re: *Project COLT XXVII (Renaissance Technologies) - Approvals Notification (SCM has notified and received approval from the following in relation to proceeding with the proposed transaction: Tax, Finance, Credit Risk, Market Risk, Regulatory, Legal, Compliance, and Operations.)*. [BARCLAYS-PSI-017091-093]

66. Barclays email, dated November 2012, re: *Palomino options (...it was agreed that any exit from this structure would not result in the 60 days notice would be given, rather there would be more notice meaning that Reny would not have to close out the option and suffer short term capital gains tax.)*. [BARCLAYS-PSI-322103]

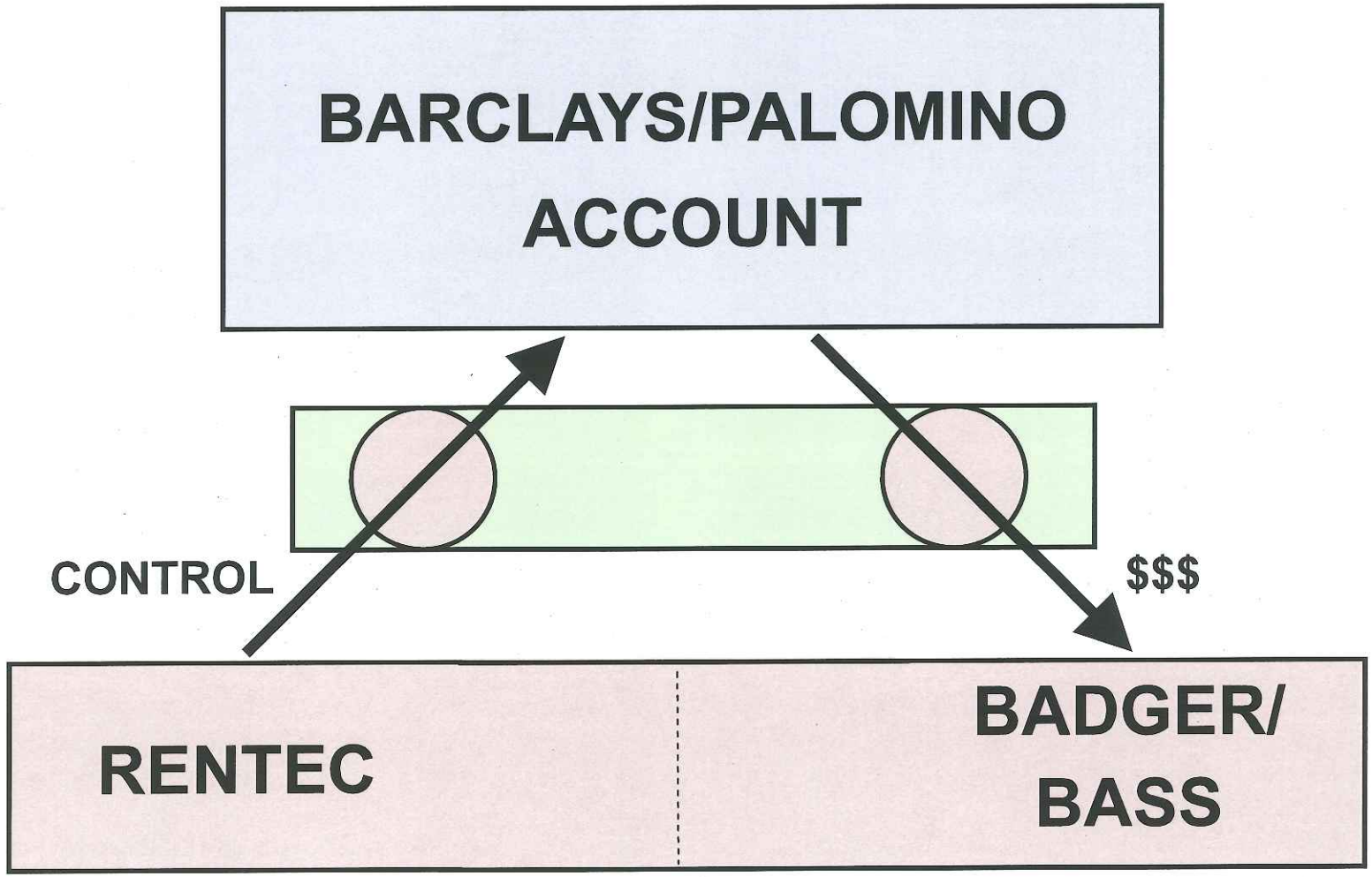
67. *BARCLAYS, New COLT Transaction, Transaction Review Committee, December 2013, (A reputational risk may arise to Barclays if the Original COLT Transaction proceeds to court or is included in a public hearing. However, it is considered that the New COLT Transaction does not meaningfully increase Barclays' reputation risk in relation to the COLT Transactions, especially as it eliminate the Rate Differential Benefit.)*. [BARCLAYS-PSI-748587-589]

68. Excerpts of *Securities and Exchange Commission Form 20-F,* Annual Reports for Barclays PLC, Barclays Bank PLC, reflecting that Palomino was not controlled by Barclays.
    a. Fiscal year ended December 31, 2009;
    b. Fiscal year ended December 31, 2010;
    c. Fiscal year ended December 31, 2011;
    d. Fiscal year ended December 31, 2012; and
    e. Fiscal year ended December 31, 2013.

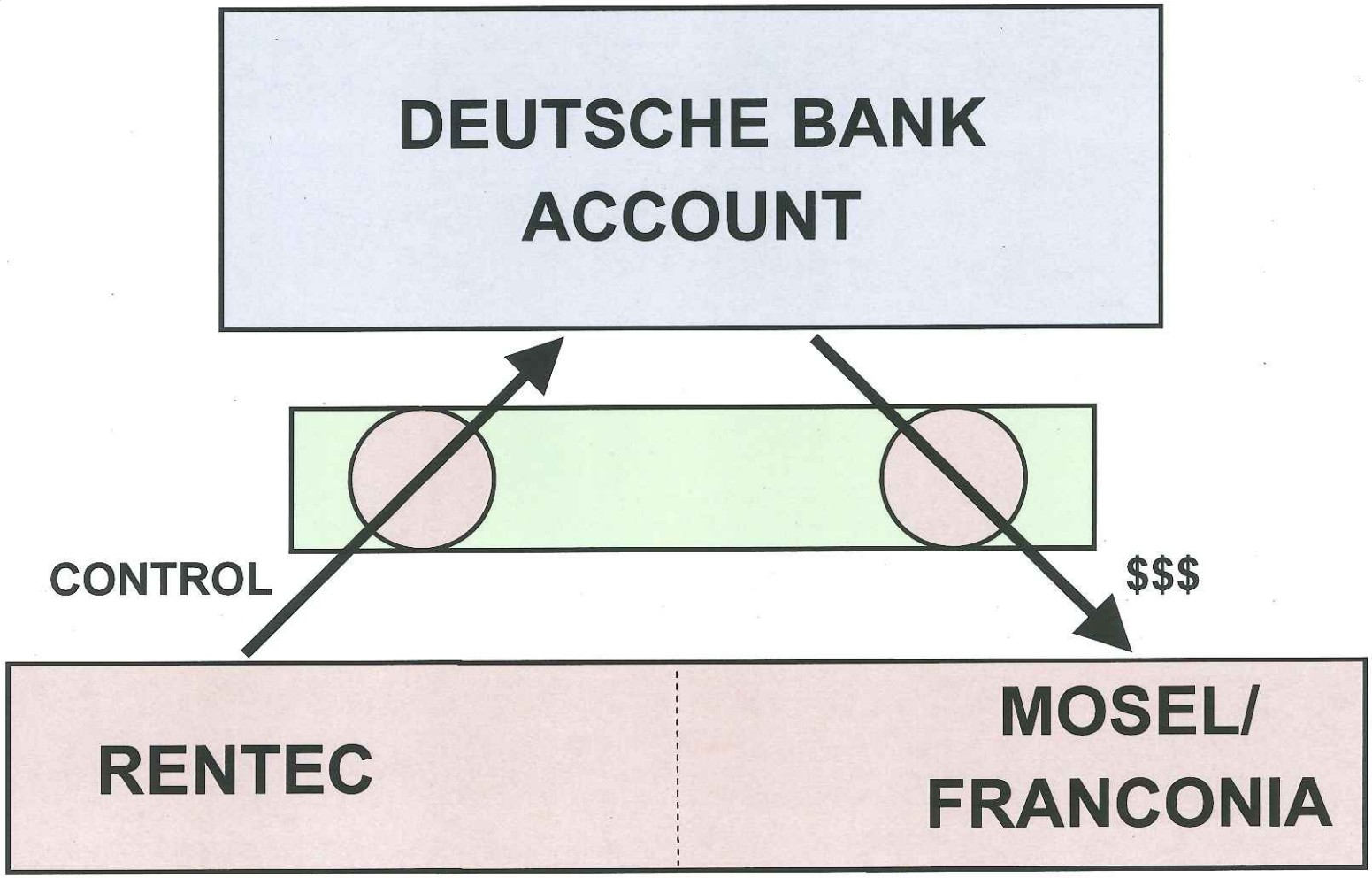
    (...they are excluded from consolidation because the Group either cannot direct the financial and operating policies of these entities, or on the grounds that another entity has a superior economic interest in them.).

✧ ✧ ✧

THE FICTION OF INDEPENDENCE



THE FICTION OF INDEPENDENCE



RENTEC CONTROL OF PALOMINO

- "Palomino was created solely to enable RenTec (sponsor) to benefit (through the Badger Options and Barclays' Options) from its long-short statistical arbitrage strategy in an efficient manner."

- "The trading activities of Palomino in relation to the [Prime Brokerage] Accounts are managed solely by RenTec as the Trading Manager such that RenTec can obtain the majority of the benefits from Palomino's activities."

- "As described in Section VII in relation to the [Investment Management Agreement], the [Prime Brokerage] Accounts are controlled by RenTec."

- "RenTec is effectively entitled (through the Badger Options and the Barclays' Options) to 100% of the benefits from Palomino's trading activities less any prime brokerage fees paid to BCI and BCSL in respect of the PB Accounts."

- "RenTec is exposed to 100% of the risks from Palomino's trading activities up to a maximum of the call option premiums. …Barclays Credit and Market Risk departments are comfortable the gap risk is managed within acceptable limits."

- "Conclusion: RenTec controls the major activities of Palomino and is exposed to substantially all significant risks and rewards arising from the activities carried out through the [Prime Brokerage] Accounts, being the only permitted activities of Palomino."

Source: Excerpts from 6/24/2009 Barclays Memorandum to PwC, "Palomino Limited," the purpose of which was to set out the proposed accounting treatment relating to Palomino, BARCLAYS-PSI-139757-766, at 763-764.

Medallion Master Funds

MOSEL EQUITIES LP (Delaware)	BADGER HOLDINGS LP (Delaware)	MEDALLION HOLDINGS LTD (Bermuda-4.13 EXEMPT)	MEDALLION TRADING (Bermuda – 4.7 EXEMPT)	NOVA FUND LP (Delaware)

The 5 Medallion Master Funds are owned jointly by the 6 Medallion Feeders and are structured to meet a variety of legal and tax Requirements. ***Please click on the buttons above to get more information*:**

Mosel Equities LP purchases barrier options offered by Deutsche Bank

Badger Holdings LP purchases barrier options offered by Barclays Bank

Medallion Holdings Ltd is the holding company for a variety of trading entities

Medallion Trading trades Futures, Foreign Exchange, Fixed Income Securities and Options not otherwise traded in other Renaissance related entities

Nova Fund LP is a Broker/Dealer in a Joint Back Office arrangement with Bear Stearns.

RETURN TO MEDALLION PAGE | RETURN TO MAIN PAGE

SIGNATORIES TO FRANCONIA-RENTEC INVESTMENT ADVISORY AGREEMENT

assignable, transferable or delegable without the written consent of the other party hereto. Any attempted assignment, transfer or delegation hereof without such consent shall be void.

9. **Waiver; Modification.** No provision of this Agreement may be waived or modified other than by a writing signed by the party to be charged with such waiver or modification. This Agreement constitutes the entire agreement between the Client and Advisor. Any supplement to this Agreement shall be in writing, signed by the parties hereto.

10. **Governing Law.** This Agreement shall be governed by and construed in accordance with the laws of the State of New York without giving effect to conflicts of laws.

IN WITNESS WHEREOF, the parties have entered into this Agreement as of the day and year first above written.

FRANCONIA EQUITIES LTD.

By: _____
Mark Silber
Vice President and Director

RENAISSANCE TECHNOLOGIES CORP.

By: _____
Mark Silber
Vice President

SIGNATORIES TO
MOSEL LIMITED PARTNERSHIP AGREEMENT

service of process in any action arising out of this Agreement by the mailing thereof by registered or certified mail, return receipt requested, to such Partner's address set forth in the Schedule of Partners. In any action to enforce any provision of this Agreement, the prevailing party shall be entitled to recover all expenses, including reasonable attorneys fees, incurred in connection therewith.

8.5 Not for Benefit of Creditors.

The provisions of this Agreement are intended only for the regulation of relations among Partners and between Partners and former or prospective Partners and the Partnership. This Agreement is not intended for the benefit of non-Partner creditors and no rights are granted to non-Partner creditors under this Agreement.

8.6 Consents.

Any and all consents, agreements or approvals provided for or permitted by this Agreement shall be in writing and a signed copy thereof shall be filed and kept with the books of the Partnership.

8.7 Miscellaneous.

(a) The captions and titles preceding the text of each Section hereof shall be disregarded in the construction of this Agreement.

(b) This Agreement may be executed in counterparts, each of which shall be deemed to be an original hereof.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement as of the day and year first above written.

GENERAL PARTNER:

RENAISSANCE TECHNOLOGIES LLC.

By: _____
MARK SILBER
VICE PRESIDENT

LIMITED PARTNERS:

MEDALLION FUND L.P.
By: Renaissance Technologies LLC.
its General Partner

By: _____
Mark Silber, Vice President

MEDALLION ASSOCIATES L.P.
By: Renaissance Technologies LLC.
its General Partner

By: _____
Mark Silber, Vice President

MEDALLION USA L.P.
By: Renaissance Technologies LLC.
its General Partner

By: _____
Mark Silber, Vice President

MEDALLION RMP FUND L.P.
By: Renaissance Technologies LLC.
its General Partner

By: _____
Mark Silber, Vice President

MEDALLION INTERNATIONAL LTD.

By: _____
Mark Silber, Director

MEDALLION CAPITAL INVESTMENTS, LTD.

By: _____
Mark Silber, Director

SIGNATORIES TO
BASS-RENTEC INVESTMENT ADVISORY AGREEMENT

assignable, transferable or delegable without the written consent of the other party hereto. Any attempted assignment, transfer or delegation hereof without such consent shall be void.

9. **Waiver; Modification.** No provision of this Agreement may be waived or modified other than by a writing signed by the party to be charged with such waiver or modification. This Agreement constitutes the entire agreement between the Client and Advisor. Any supplement to this Agreement shall be in writing, signed by the parties hereto.

10. **Governing Law.** This Agreement shall be governed by and construed in accordance with the laws of the State of Delaware without giving effect to conflicts of laws.

IN WITNESS WHEREOF, the parties have entered into this Agreement as of the day and year first above written.

BASS EQUITIES LTD.

By: _____
Mark Silber
Vice President and Director

RENAISSANCE TECHNOLOGIES CORP.

By: _____
Mark Silber
Vice President

SIGNATORIES TO
BADGER HOLDINGS LTD. PARTNERSHIP AGREEMENT

service of process in any action arising out of this Agreement by the mailing thereof by registered or certified mail, return receipt requested, to such Partner's address set forth in the Schedule of Partners. In any action to enforce any provision of this Agreement, the prevailing party shall be entitled to recover all expenses, including reasonable attorneys fees, incurred in connection therewith.

8.5 Not for Benefit of Creditors.

The provisions of this Agreement are intended only for the regulation of relations among Partners and between Partners and former or prospective Partners and the Partnership. This Agreement is not intended for the benefit of non-Partner creditors and no rights are granted to non-Partner creditors under this Agreement.

8.6 Consents.

Any and all consents, agreements or approvals provided for or permitted by this Agreement shall be in writing and a signed copy thereof shall be filed and kept with the books of the Partnership.

8.7 Miscellaneous.

(a) The captions and titles preceding the text of each Section hereof shall be disregarded in the construction of this Agreement.

(b) This Agreement may be executed in counterparts, each of which shall be deemed to be an original hereof.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement as of the day and year first above written.

GENERAL PARTNER:

RENAISSANCE TECHNOLOGIES CORP.

By: _____

LIMITED PARTNERS:

MEDALLION FUND L.P.
By: Renaissance Technologies Corp.
its General Partner

By: _____
Mark Silber, Vice President

MEDALLION ASSOCIATES L.P.
By: Renaissance Technologies Corp.
its General Partner

By: _____
Mark Silber, Vice President

MEDALLION USA L.P.
By: Renaissance Technologies Corp.
its General Partner

By: _____
Mark Silber, Vice President

MEDALLION RMP FUND L.P.
By: Renaissance Technologies Corp.
its General Partner

By: _____
Mark Silber, Vice President

MEDALLION INTERNATIONAL LTD.

By: _____
Mark Silber, Director

MEDALLION CAPITAL INVESTMENTS, LTD.

By: _____
Mark Silber, Director

Office of Chief Counsel
Internal Revenue Service
Memorandum

Number: **AM2010-005**

Release Date: 11/12/10
CC:FIP

POSTF-153378-07

UILC: 1234.03-00

date: October 15, 2010

to: Area Counsel (Financial Services)
(Large Business & International)

from: Associate Chief Counsel
(Financial Institutions & Products)

subject: Hedge Fund Basket Option Contracts

This memorandum addresses certain contracts styled as options in form but acting like direct ownership of the underlying property in substance. This memorandum should not be used or cited as precedent.

ISSUES

Where the taxpayer, a partnership, entered into a contract styled as an option to purchase a basket of securities that the taxpayer's general partner also actively managed and controlled while the contract remained open, and with respect to which the taxpayer had opportunity for full gain and income and substantially all of risk of loss: (1) whether the contract should be treated as an option for tax purposes; and (2) whether the taxpayer should be treated as the tax owner of the securities.[1]

CONCLUSIONS

(1) The contract does not function like an option, and should not be treated as such.

(2) A contract that provides a taxpayer with dominion and control over a basket of securities, the opportunity for full gain and income, and substantially all of the risk of loss, provides to the taxpayer beneficial ownership of the securities for tax purposes.

[1] To simplify the discussion, this memorandum refers to both long and short positions in securities as "securities."

Thus, the taxpayer must currently recognize the trading gains, losses, income, or expense resulting from trading and holding the securities in the basket.

FACTS

Taxpayer and affiliated entities. The taxpayer is a Delaware limited partnership that operates as a hedge fund (the taxpayer is hereinafter referred to as "HF"). During the relevant tax years, HF and other affiliated limited partnerships ("Other Hedge Funds") had common partners that were Delaware limited partnerships ("Feeder Funds"), one of which was GP. GP was the general partner of HF and the Other Hedge Funds. GP also served as the Investment Manager for the Other Hedge Funds. Among these entities, only GP had employees, and the individuals who owned interests in GP also owned interests in the Feeder Funds.

Basket Contract. HF entered into a contract ("Basket Contract") with Foreign Bank ("FB"), which is a U.K. public limited company.[2] The Basket Contract was styled as a call option on a basket of securities ("Reference Basket") held in a specified prime brokerage account administered by FB. The value of the securities in the Reference Basket was $10x when the parties entered into the Basket Contract, and the Reference Basket was funded with $1x in "premium" paid by HF and $9x paid by FB. FB determined HF's $1x premium through its finance department, rather than through option valuation formulas typically used when pricing standard options. HF had the right to terminate the Basket Contract at any time during a two-year term and receive a specified "Cash Settlement Amount," which was based on the performance of the Reference Basket.

The Basket Contract provided for a strike price equal to the initial value of the Reference Basket ($10x). The Cash Settlement Amount that HF was entitled to receive upon termination of the contract equaled the greater of (1) zero or (2) the reimbursement of the $1x premium, plus "Basket Gain" or less "Basket Loss." Basket Gain or Loss comprised:

> (1) trading gains, unrealized gains, interest, dividends, or other current income; minus: (2)(a) trading losses, unrealized losses, interest, dividend, or other current expenses; (b) commissions and other trading costs incurred in acquiring or disposing of the securities and positions; and (c) financing charges on the $9x provided by FB.

Accordingly, Basket Gain or Loss fully reflected all of the net economic return or loss on the performance of the Reference Basket, including the financing charges on $9x.

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[2] This memorandum will not consider whether FB or any investors in HF have income that is effectively connected with a trade or business within the United States pursuant to I.R.C. §§ 864(b)-(c), 871(b), and 882(a).

Moreover, the Cash Settlement Amount allowed HF to receive back its $1x premium investment, reduced by any Basket Loss. Specifically, the Cash Settlement Amount would be reduced, dollar-for-dollar, for any Basket Losses up to $1x (i.e., 10% of the initial amount in the basket).

The Basket Contract contained a "Knock-Out" provision that automatically terminated the contract at any time that Basket Losses reached 10%, which was the same amount as HF's initial premium investment.[3] Thus, if Basket Losses breached the Knock-Out barrier, the contract would terminate and HF would receive a Cash Settlement Amount of zero. FB also had the right to require HF to enter into risk reducing trades even before losses in the Reference Basket reached the 10% barrier. Consequently, HF bore the risk of loss, dollar-for-dollar, for Basket Losses up to the amount of its investment. The Knock-Out provision protected FB against additional Basket Losses by allowing FB to terminate the Basket Contract and obtain control over the assets in the Reference Basket.

Investment Management Agreement. Related to its Basket Contract with HF, FB entered into an Investment Management Agreement ("IMA") with GP. In accordance with the IMA, GP conducted short-term trading (including acquisition of the initial make-up of the Reference Basket) of both short and long positions in exchange traded and over-the-counter securities as permitted by Investment Guidelines incorporated by reference into the IMA. GP conducted such short-term trading by instructing FB to execute GP's trading decisions. The Investment Guidelines limited the aggregate trading positions in the Reference Basket based on the value of any one security, business sector, or types of issuers; FB could terminate the Basket Contract if GP violated the Investment Guidelines, regardless of whether the value of the Reference Basket was near the Knock-Out barrier.

Although not contractually obligated to follow GP's specific trading instructions as long as the net value of the Reference Basket nevertheless reflected GP's instructions, FB in fact executed all of GP's trading instructions, which could entail numerous trades per day. In addition to making every trading decision, GP also had power to make corporate action decisions over the securities, addressing tender offers, mergers, and other decisions that offer a choice of consideration of cash or shares.

Nothing in the agreements between HF and FB contractually prohibited FB from commingling, lending or otherwise using the securities in the Reference Basket without notice to HF. These are customary rights a pledgee has over the assets of its brokerage customers.

[3] A contract that is subject to a knock-out contingency is part of a broader category of contracts referred to as "barrier options." See Emanuel Derman and Iraj Kani, The Ins and Outs of Barrier Options: Part 2, Derivatives Quarterly, Spring 1997, at 73, 77. As this memorandum explains, infra, the Basket Contract's particular Knock-Out provision caused the contract to function in a manner unlike options generally.

GP Management Fee Arrangement. Under the IMA, FB paid GP a fixed annual fee of less than 0.1% of $10x, which was described as a compensation and incentive fee for trading management of the Reference Basket. This is significantly less than GP received from HF's partners and beneficial owners of HF (Feeder Funds) for providing the same service. The Feeder Funds' partnership agreements provided GP with 2% of the net asset value of the Reference Basket and 20% of specified levels of Basket Gain. These fees from the Feeder Funds were consistent with the standard industry fees for trading and management services.

LAW AND ANALYSIS

HF in form owned a call option to purchase the Reference Basket, which contained securities held by FB. It has long been a principle of federal tax law, however, that the substance of a transaction and not its form will determine the federal income tax consequences of the transaction. Commissioner v. Court Holding Company, 324 U.S. 331 (1945); Gregory v. Helvering, 293 U.S. 465, 470 (1935). If the Basket Contract was not, in substance, an option contract, then HF must treat the transaction for tax purposes in accordance with its actual substance. This memorandum first addresses whether the Basket Contract qualifies as an option for tax purposes, and then addresses whether HF, in substance, is the tax owner of the Reference Basket.[4]

1. The Basket Contract Is Not an Option

Although labeled as an option, the Basket Contract lacks the essential economic and legal characteristics of an option.

Case law defines an option as having two characteristics: (1) a continuing offer to do an act, or to forebear from doing an act, which does not ripen into a contract until it is accepted; and (2) an agreement to leave the offer open for a specified period of time. Saviano v. Commissioner, 80 T.C. 955, 970 (1983), aff'd, 765 F.2d 643 (7th Cir. 1985). The purpose of an option that references property is to provide a party the opportunity to buy or sell specified property in the future at a defined price without the potential liability inherent in being obligated to buy or sell. See United States Freight Co. v. United States, 422 F.2d 887, 894-95 (Ct.Cl. 1970). Thus, an option only makes sense economically if the option holder's cost of failing to exercise is lower than the holder's

[4] Hedge Funds typically own directly the assets they manage by using prime brokerage accounts offered by investment banks and securities firms. In this case, HF sought two tax advantages in characterizing the Basket Contract as an option to purchase the Reference Basket rather than as direct ownership of basket assets through a prime brokerage account: (1) Basket Gains, including short term gains, interest, and dividends earned within the Reference Basket, would not be taxable to HF until HF exercised the option, since unexercised options on property are typically treated as "open transactions" pursuant to Rev. Rul. 58-234, 1958-1 C.B. 279; and (2) Basket Gains, including short term gains, interest, and dividends, would taxable at the low rate applicable to long-term capital gains if HF received the Cash Settlement Amount after holding the Basket Contract for more than one year, pursuant to I.R.C. §§ 1221; 1234(a)(1), (c)(2).

potential liability had he or she instead entered into and breached a contract to buy or sell the underlying property. See Halle v. Commissioner, 83 F.3d 649, 655-56 (4th Cir. 1996)(comparing potential buyer's liquidated damages with seller's expected damages in event of buyer's default to determine whether contract is option versus sale).[5] A contract that imposes a high cost upon an offeree for failing to accept an offer will not be deemed an option if the cost effectively compels the offeree to exercise. See Progressive Corp. v. United States, 970 F.2d 188, 193 (6th Cir. 1992) (explaining that certain "options" may be disguised sales because "the exercise of such options may be virtually guaranteed"); Commissioner v. Baertschi, 412 F.2d 494, 498 (6th Cir. 1969) (noting buyer's high cost of breach equal to 29% of property value is indication of sale rather than option).[6]

Upon applying these principles to the agreements between HF and FB, it is clear that the Basket Contract, despite its option terminology, lacks the requisite characteristics of an option. In particular, two elements of the agreements between HF and FB are contrary to the typical functioning of an option: (a) the interplay between the Basket Contract's premium, Cash Settlement Amount, and Knock-Out provision, which imposed upon HF costs similar to an obligated buyer and preclude any possibility of lapse; and (b) HF's ability to alter the Reference Basket, through GP, while the Basket Contract remained open, which is inconsistent with the notion that an option on property must reference specific property at a defined price.

a. Costs Imposed upon HF and the Possibility of Lapse

The Basket Contract did not function like an option insofar as its terms imposed costs upon HF that compelled HF to exercise rather than allow it to lapse. As noted by the courts in United States Freight and Halle, a call option should function so that the holder has a real choice to allow the option to lapse; if the contact imposes a cost for failure to exercise that places the holder in a similar economic position to a party obligated to buy, then the holder lacks the choice not to buy and the contract is not an option. In the instant case, the Cash Settlement Amount ensured that HF would lose its premium investment dollar-for-dollar for Basket Losses until the Reference Basket fell in value by the full amount of HF's premium investment (i.e., 10%), and the Knock-Out provision would terminate the contract with HF losing its entire investment. Accordingly, the terms of the Basket Contract ensured one of two outcomes: (1) if the Reference Basket increased in value, or decreased by less than 10%, HF would exercise in order

[5] In terms of pricing and risk, call options generally allocate risk of loss between option writers and holders such that the option writers/sellers bear the risk of price decreases in the underlying asset while the option holders/buyers enjoy the benefits of price increases while also bearing the risk that they may lose their premium. See Halle, 83 F.3d at 657.

[6] The court in Progressive adopted language from Rev. Rul. 80-238, 1980-2 C.B. 96, which held that a purported stock option is actually a sale if it is deep "in-the-money" at the time it is issued, i.e., the holder can purchase the stock at below current market price such that the holder is almost certain to exercise. Likewise, the Service in Rev. Rul. 82-150, 1982-2 C.B. 110, held that a sale of a deep-in-the-money option was, in substance, not an option but a completed sale of the referenced stock.

to recoup at least a portion of its investment; or (2) the Reference Basket would fall in value by 10% and the Knock-Out provision would force HF to terminate the option and receive nothing. Thus, the Cash Settlement Amount placed HF in the same economic position as a party obligated to buy the Reference Basket, while the Knock-Out provision ensured that the Basket Contract would never lapse unexercised. In this manner, the Basket Contract did not function like an option.

Moreover, there is no indication that HF and FB employed recognized option pricing methodologies to determine the premium. Rather, the premium that HF paid was merely a fixed percentage of the Reference Basket (i.e., 10%), which is also equal to the loss required to trigger the Knock-Out barrier. Thus, the premium under the Basket Contract is more akin to collateral for a nonrecourse margin loan than to an option premium. The similarity between HF's premium and margin loan collateral is consistent with the other terms of the Basket Contract, which, again, imposed potential costs upon HF that were more like those imposed upon an owner or a party obligated to buy than upon a party with the mere option to buy.

b. The Effect of HF's Ability (Through GP) to Alter the Reference Basket

The Basket Contract did not function like and option insofar as it referenced a basket of assets that HF (through GP and the IMA) can and did alter by actively trading the underlying securities. Though the IMA in form was a management agreement between GP and FB, which permitted GP to trade assets within the Reference Basket, GP in substance acted on HF's behalf. GP was the only entity among HF's affiliates that had employees, and GP served as the investment manager for Other Hedge Funds that had common partners with HF. Since the Basket Contract provided HF with full opportunity for gain and risk of loss up to the first 10% of losses, GP's management of the Reference Basket served to benefit HF more than FB. This is evident in the manner in which FB and HF compensated GP; the fee that FB paid to GP was a fixed annual fee of less than 0.1% of $10x, whereas the fee that HF's partners and beneficial owners (the Feeder Funds) paid to HF for comparable services was much larger, equal to 2% of the net asset value of the Reference Basket and 20% of specified levels of Basket Gain. The fees that the Feeder Funds paid to GP were consistent with the standard industry fees for trading and management services. Thus, the facts and circumstances indicate that GP was trading within the Reference Basket on behalf of HF, rather than FB.

HF's control over the Reference Basket caused the Basket Contract to operate unlike an option. As explained by the court in Saviano, an option provides one party with the choice of accepting an offer, while the other party is obligated to keep the offer open for a specified period of time. Options on property allow the holder to accept an offer buy or sell specified property at defined price. In this case, the Basket Contract purports to identify the Reference Basket as specific property subject to an option, yet the IMA contradicts that characterization by allowing HF (through GP) to alter the Reference Basket while the Basket Contract remained open. HF's ability to trade component securities within the Reference Basket calls into question whether the Reference Basket

constitutes specific property apart from its components; thus, rather than having the right to buy the Reference Basket, HF could be viewed as having a series of separate contractual rights for each security within the Reference Basket such that each trade HF executes while the Basket Contract is open would generate a taxable event attributable to that trade under sec. 1001.[7] FB permitted HF to have this control because the terms of the Basket Contract ensured that FB was protected from HF's investment decisions; as noted above, the Basket Contract imposed potential costs upon HF that were more consistent with a party that had an obligation to buy than upon a party with a mere option to buy. Not surprisingly, the Basket Contract was neither priced like an option nor did it apportion costs like a typical option because HF's power to control and alter the Reference Basket was contrary to the very notion of what an option is.[8]

Having applied the principles set forth in the relevant authorities to the terms of the Basket Contract, we conclude that the Basket Contract is not an option for Federal income tax purposes.

2. HF Had Tax Ownership of the Reference Basket

We now turn to the question of whether HF, in substance, owns the Reference Basket.[9]

To determine whether a taxpayer holds the beneficial ownership of assets for tax purposes, courts have considered numerous factors indicative of the burdens and benefits of ownership.[10] No one factor is determinative; courts accord varying weight to

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[7] See generally James M. Peaslee, Modifications of Nondebt Financial Instruments as Deemed Exchanges, Tax Notes, April 29, 2002, at 766-67 (discussing whether options referencing baskets of generate deemed exchanges under sec. 1001 when basket is changed in accordance with terms of the contract). Given the conclusion in Part 2 of this memorandum's "Law and Analysis" section that HF actually owned the component securities within the basket for tax purposes, this memorandum need not address whether the Reference Basket should be disaggregated into a series of contractual rights.

[8] The Treasury Regulations governing notional principal contracts also recognize this principle by prohibiting parties to a contract from controlling indexes that are used as referenced assets. Treas. Reg. § 1.446-3(c)(2)(iii), (c)(4)(ii).

[9] We have already concluded that the Basket Contract was not an option because HF is compelled to exercise; thus, the remaining question is whether HF owned the assets in the Reference Basket during the period in issue, or whether HF was merely obligated to purchase the assets in the future, i.e., through a forward contract. Forward contracts are typically treated as open transactions, and parties obligated to buy under forward contracts are not taxed as though they are current owners of the asset. See Lucas v. N. Texas Lumber Co., 281 U.S. 11, 13 (1930) (agreement to sell land in 1916 was not a closed sale for tax purposes until price paid and title transferred in 1917). In certain circumstances, however, taxpayers holding forward contracts may be treated as constructively owning the underlying asset. See I.R.C. § 1260(d)(1)(B) (treating taxpayers as constructively owning financial assets subject to certain forward contracts).

[10] In Grodt & McKay Realty, Inc. v. Commissioner, 77 T.C. 1221 (1981), the Tax Court applied an eight factor test to determine whether taxpayer owned cattle, including: (1) Whether legal title passes; (2) how

each factor, depending on the type of property and transaction at issue. See Pac. Coast Music Jobbers v. Commissioner, 55 T.C. 866, 874 (1971) (employing multi-factor test to determine ownership of stock and according less weight to attributes that are formalistic and "not useful"), aff'd, 457 F.2d 1165 (5th Cir. 1972). For example, in determining the ownership of stock for tax purposes, the following factors are most relevant: (1) the ability to sell the shares; (2) the power to vote, especially as a means of controlling the board of directors and managing the underlying business; (3) the right to receive dividends; and (4) the opportunity for gain and the risk of loss in the value of the shares. See, e.g., Ragghianti v. Commissioner, 71 T.C. 346, 350 (1978) (sharing in profit and loss, and participating in shareholder meetings); Pac. Coast Music, 55 T.C. at 876-77 (dividends and voting proxies); Hall v. Commissioner, 15 T.C. 195, 200 (1950), aff'd,194 F.2d 538 (9th Cir. 1952) (noting that right of sale is "one of the most important attributes of ownership").

Tax Court has recently issued two opinions in which it addressed whether taxpayers were owners of fungible securities -- the type of securities in the Reference Basket. In each case, the court employed an analysis that was consistent with the principles described above. In Anschutz v. Commissioner, 135 T.C. No. 5 (July 22, 2010), the taxpayer received a nonrefundable upfront cash payment in exchange for transferring stock subject to a purported forward sale of the same stock (with variable number of shares to be delivered) and a purported share lending agreement of the same stock. The Tax Court held that the taxpayer had transferred its beneficial ownership of the stock because the taxpayer: (1) transferred most of the opportunity for gain; (2) eliminated its risk of loss; and (3) the party to whom the taxpayer loaned the stock had the right to dispose of the shares. Anschutz, slip op. at 46-47.

In Calloway v. Commissioner, 135 T.C. No. 3 (July 8, 2010), the taxpayer likewise received a nonrefundable upfront cash payment in exchange for transferring stock, in this case subject to a purported loan. The Tax Court held that the taxpayer had transferred its beneficial ownership because the taxpayer: (1) could not sell the shares during the three year term of the purported loan; (2) eliminated its risk of loss; and (3) the purported stock borrower was authorized to sell the stock immediately after receiving it from the taxpayer. Calloway, slip op. at 13-18.

The Court of Appeals for the Eighth Circuit focused on the same three factors employed by the Tax Court and Anschutz and Calloway in holding that a taxpayer had beneficial ownership of mutual fund shares that supported a variable annuity contract held by the taxpayer. In Christoffersen v. United States, 749 F.2d 513 (8th Cir. 1984), the taxpayers purchased a variable annuity contract that provided the taxpayers the full

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the parties treat the transaction; (3) whether an equity interest in property is acquired; (4) whether the contract creates a present obligation on the seller to transfer ownership and a present obligation on the purchaser to make payments; (5) whether the right of possession is vested in the purchaser; (6) which party pays property taxes; (7) which party bears the risk of loss or damage to the property; and (8) which party receives the profits from the operation and sale of the property. 77 T.C. at 1237-38.

investment return and risk of loss of mutual fund shares held in an account of the issuing insurance company. The taxpayers had the right to direct that their premium payments be invested in any one of six publicly traded mutual funds, and the taxpayers could reallocate their investment among the funds at any time. The taxpayers also had the right upon seven days notice to withdraw funds, surrender the contract, or apply the accumulated value under the contract to provide annuity payments. The court noted that the taxpayer bore full investment risk and had immediate access to the funds, and that the policy's limitations upon the taxpayer's control of the mutual fund shares were no different than the limits imposed by traditional brokerage accounts. Id. at 516.[11]

Upon application of the factors set forth by the authorities discussed above to the terms of the agreements between HF and FB, it is clear that HF should be treated as the tax owner of the Reference Basket because HF had: (a) opportunity for full trading gain and current income; (b) substantially all of the risk of loss related to the Reference Basket, and (c) complete dominion and control over the Reference Basket.

a. HF's Opportunity for Gain and Income

HF had full opportunity for gain and income from the Reference Basket performance. The Cash Settlement Amount included the refund of HF's premium investment and Basket Gain or Loss, which was defined to include all trading gains and losses, net current income or expenses, trading costs, and a financing charge for the funding of $9x provided by FB. Basket Gain or Loss reflected all of the economic return or loss on the performance of the Reference Basket. Because HF could also exercise its right to receive the Cash Settlement Amount at any time, HF was at all times free to take full advantage of its opportunity for gain and income.[12] Moreover, HF could lock in gain in any single position within the Reference Basket by instructing its disposition, while the Basket Contract remained open.

b. HF's Risk of Loss

HF had substantially all of the risk of loss of the Reference Basket. As explained in Part 1.a. of this memorandum's "Law and Analysis" section, the Basket Contract's Cash Settlement Amount reduced HF's ability to recoup its investment to the extent of any Basket Loss. HF had the risk of loss, dollar-for-dollar, up to the full amount of its premium investment, which was equal to 10% of the Reference Basket's initial value.

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[11] The IRS has declined to treat policyholders as the owner of mutual fund shares supporting variable life and annuity contracts if the shares are only available to the insurer's policyholders, and not to the general public, thus indicating that the policyholders lacked control over the mutual funds. Rev. Rul. 2003-91, 2003-2 C.B. 347; Rev. Rul. 81-225, 1981-2 C.B. 12.

[12] See Calloway, slip op. at 31 (taxpayer has full opportunity for gain "only if the taxpayer is able to effect a sale of the security in the ordinary course of the relevant market (e.g., by calling a broker to place a sale) whenever the security is in-the-money." (quoting Samueli v. Commissioner, 132 T.C. 37, 48 (2009)).

Moreover, due to the Knock-Out provision, the full risk of loss inherent in the Basket Contract was the 10% borne by HF.

FB did indeed bear a theoretical risk; FB could possibly suffer a loss if Basket Losses were incurred so quickly that FB was unable to liquidate the Reference Basket timely enough to prevent losses beyond the 10% threshold created by the Knock-Out. That possibility was remote, however, and FB also had rights through the Investment Guidelines to force HF into risk reducing trades or cause an early termination (and liquidation) of the Basket Contract even before Basket Losses reached the 10% barrier. Thus, the Knock-Out provision (and FB's additional risk-reduction rights) merely reflected the typical arrangement between a broker and an investor who purchases securities through margin loans in a prime brokerage account, i.e., the investor's risk of loss is limited to the amount of the purchase price the investor itself funded, while the broker has rights to liquidate the securities or take other actions to ensure that losses will not exceed the amount funded by the investor.[13]

c. HF's Control over the Reference Basket

HF, through GP, had complete dominion and control over the Reference Basket. As HF's agent, GP instructed numerous trades per day, which FB executed without exception. GP also had the power to make corporate action decisions over the securities in the Reference Basket. FB arguably had some control over the Reference Basket, as FB could have (and may have) lent or rehypothecated the securities without HF's knowledge. Nevertheless, these are customary powers that a broker-pledgee has over assets under custodial arrangement with prime brokerage customers. In this regard, HF's ability to trade any security within the Reference Basket or terminate the Basket Contract at any time and receive the Cash Settlement Amount further places HF in a similar position to an owner of a prime brokerage account and limits FB's ability to lend or rehypothecate the securities.

Accordingly, HF had: (a) opportunity for full trading gain and current income; (b) all of the risk of loss inherent in the Basket Contract; and (c) complete dominion and control of the Reference Basket. We conclude that HF is the beneficial owner of the Reference Basket for tax purposes.

[13] Furthermore, courts have respected the debt character of nonrecourse debt used in leveraged purchases of property (and thus the debtor's ownership of the leverage purchased property), despite the lender's bearing the risk of loss if the property decreases in value below the amount owed on the loan. For example, the Court of Appeals for the Fourth Circuit in Odend'hal v. Commissioner, 748 F.2d 908 (4th Cir. 1984) recognized that a nonrecourse obligation constitutes genuine indebtedness "so long as the fair market value of the property is at least equal to the amount of the nonrecourse debt at the time it was incurred, because the taxpayer, even though he has no personal liability at stake, has an economic incentive to pay off the debt rather than to lose the collateral." Id. at 912.

CASE DEVELOPMENT, HAZARDS AND OTHER CONSIDERATIONS

You have informed us that there are variations to the contract described above. We encourage you to develop those cases, and stand ready to assist with legal analysis and alternative arguments. For example, in some cases it may be appropriate to assert that changes in a contract's reference index generate taxable exchanges of either contractual rights within the reference index, or of the entire contract; these would be alternative arguments to direct ownership of the underlying securities. We also suspect that this transaction is not confined to large hedge funds. Lastly, given the particularly aggressive nature of this transaction, we further encourage you to gather information about similar cases so that the Service can determine whether to resolve this issue case-by-case or through the formal programs in place for addressing potentially abusive transactions.

Please call Robert A. Martin or Anna H. Kim at (202) 622-3900 if you have any further questions.

cc: Linda M. Kroening
Division Counsel
(Large Business & International)

Walter Harris
Industry Director
(Financial Services)

From: Peter Brown <peter@rentec.com>
Sent: Wednesday, September 10, 2008 5:09 AM
To: Rowen, Jim
Subject: Re-shuffle- Follow-up

Importance: Low

Thanks. -Peter

Rowen, Jim writes:
> I confirmed that there is no prohibition against end-of-day transfers in our new MAPS documentation. We may re-shuffle the constituents of the underlying options at the end of the day, at the current closing price. For the avoidance of doubt any position selected to be re-shuffled will need to be transferred at the prevailing market close. These are not trades but journal entries, so there are theoretical costs to journal. Please remember that only new options have this re-shuffle functionality and the older options do not. I understand that our proposed steady state plans will require us to roll many of the existing DB options in to the new option structure. So the ability to do the end of day re-shuffle will start slowly during the fourth quarter to pick up momentum next year.
> Mark Silber was going discuss with you the ability to optimize the end of day re-shuffle process in order to keep the number of position re- shuffles to a manageable amount and below the radar of DB. DB is still testing their re-shuffle capability in anticipation of our first new MAPs option next week. I believe We can determine the appropriate re-shuffle quantity over time.. Unlike the new re-shuffle functionality The new advisory/trading guidelines transcend both old and new options.
> If you have any questions please either call me at home or at work tomorrow.
> Take care<!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 3.2//EN"> > <HTML> > <HEAD> > <META HTTP-EQUIV="Content-Type" CONTENT="text/html; charset=utf-8"> > <META NAME="Generator" CONTENT="MS Exchange Server version 6.5.7652.24"> > <TITLE>Re-shuffle- Follow-up</TITLE> > </HEAD> > <BODY> > <!-- Converted from text/plain format --> > > <P><FONT SIZE=2>I confirmed that there is no prohibition against end-of-day transfers in our new MAPS documentation. We may re-shuffle the constituents of the underlying options at the end of the day, at the current closing price. For the avoidance of doubt any position selected to be re-shuffled will need to be transferred at the prevailing market close. These are not trades but journal entries, so there are theoretical costs to journal. Please remember that only new options have this re-shuffle functionality and the older options do not. I understand that our proposed steady state plans will require us to roll many of the existing DB options in to the new option structure. So the ability to do the end of day re-shuffle will start slowly during the fourth quarter to pick up momentum next year.
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 > Take care</FONT> > </P> > > </BODY> > </HTML>

To: Daniel Koranyi[dkoranyi@rentec.com]
Cc: Peter Brown[peter@rentec.com]; Robert Mercer[mercer@rentec.com]; Jim Rowen[jrowen@rentec.com]
From: Colin Masson
Sent: Wed 11/19/2008 5:04:22 PM
Importance: Normal
Subject: Re: DB counteroffer

Dan,

I believe that 160 is pessimistic. If you look at their fig 9 for trading costs vs rate, you will see that the typical trades in their sample have a rate of about 0.25. That corresponds to liquidating 0.15 dvol in 3/5 of a day. So to do 0.15 dvol in 1 day would cut the cost to roughly 100bp. And even cheaper over several days.

Also, in doing the estimate, we have to compare the properties of the portfolio with the average of their sample. So the 80bp would be for trades just like theirs. Even our doubled spreads of 1.2e-3 are at the low-to-middle end of the points plotted in fig 6. I would read that as saying that their stocks are less liquid than ours. So in high spread times we might expect 80bp and in normal times maybe 40bp.

[redacted] = Redacted by the Permanent Subcommittee on Investigations

Colin

Daniel Koranyi wrote:
> From their working papers, it appears that the underpinnings of their model
> are reasonable, as it is predicated on the papers of Almgren, which Colin
> says are quite sensible.
>
> Colin points out that the Optimal Execution paper supports our contention
> that any portfolio they would find themselves having to liquidate would be
> low-risk, and could be liquidated slowly if required. The portfolio would be
> well diversified, market-neutral, and with low liquidity imbalance (in their
> parlance -- meaning the longs are on average no more or less liquid than the
> shorts). This would be true even if it reached the stage at which the
> barrier triggered, becuase we would still be trading it actively up to that
> point and would still be in compliance with the constraints.
>
> Further, if this were to happen, it would be after we had already cut the
> portfolio back substantially. I've looked at the position-weighted pos/dvol
> in our US MAPS portfolio since 20040101. Typically it is around [redacted] but
> both last summer and this fall, as we cut the portfolio, it came down to
> around [redacted] If we were to get to the stage where DB assumed control, we
> would surely have cut further by then. Let's say we got down to [redacted] -- then
> we are in the 80bps liquidation cost regime that Colin referenced
> (extrapolating from Fig 5 of their Market Impact paper).
>
> That Fig 5 is presumably predicated on 'standard' spreads. You can see the
> bhavior of our position-weighted average (spread/meanquote), evaluated at
> [redacted] daily, with
>
> [redacted]
>
> Historically the value has been around [redacted] i.e. a spread of [redacted] or

Permanent Subcommittee on Investigations
EXHIBIT #4

> [redacted] cents on a [redacted] stock. Last August it spiked to about twice that; in Oct
> 2008 it spiked to three times that. So far this November it is around
> [redacted] so still elevated by a factor of about two.
>
> Fig. 6 of the Market Impact paper suggests that liquidation cost is roughly
> linear in the spread, so we might expect the current liquidation cost to be
> more like 160 bp, not 80. This would in principle still cover us to a
> leverage of 62.
>
> With a leverage of 18 we are in principle covered up to a cost of 555 bp.
> Satish seemed to be content with 18:1 with, say, and 80 bp cost, but seems
> less comfortable with 18:1 with at 160 bp cost. I think we should first
> understand why this is so, since his own models suggest that there will still
> be plenty of leeway. Does he not believe his own models? Why not?
>
> But let's calculate a bit anyway. He accepts 18:1 with 80 bp, where really
> he's safe to 125:1. That's a factor of about 7. Applying that same factor
> of 7 to 160 bp yields (1/0.016)/7 = 9:1 . It is true that our recent
> leverage is between 5:1 and 6:1, so in principle we would be in compliance
> with this, but to me it seems to be too much of a giveup. On the day of
> 0.002 spread, we'd be at, say 240 bp liquidation cost --> 6:1, which is
> cutting it close; our actual leverage that day was 6.3:1 .
>
> So, I think we need to cut back on the factor of 7 safety margin. The
> following table shows what happens if we go to factors of 3, 4, and 5. The
> first column is the factor by which spreads exceed their 'normal' values.
> The second is the resulting liquidation cost in basis points (scaling
> linearly). The third column is the max leverage that liquidation cost
> allows. The next three columns are the max leverage with Satish factors of
> 3, 4, and 5 (all capped at 18).
>

factor	bps	Vmax	saf3	saf4	saf5
1.00	80	125.0	18.0	18.0	18.0
1.25	100	100.0	18.0	18.0	18.0
1.50	120	83.3	18.0	18.0	16.7
1.75	140	71.4	18.0	17.9	14.3
2.00	160	62.5	18.0	15.6	12.5
2.25	180	55.6	18.0	13.9	11.1
2.50	200	50.0	16.7	12.5	10.0
2.75	220	45.5	15.2	11.4	9.1
3.00	240	41.7	13.9	10.4	8.3
3.25	260	38.5	12.8	9.6	7.7
3.50	280	35.7	11.9	8.9	7.1
3.75	300	33.3	11.1	8.3	6.7
4.00	320	31.2	10.4	7.8	6.2
4.25	340	29.4	9.8	7.4	5.9
4.50	360	27.8	9.3	6.9	5.6
4.75	380	26.3	8.8	6.6	5.3
5.00	400	25.0	8.3	6.2	5.0

> [redacted] = Redacted by the Permanent Subcommittee on Investigations
>
> It seems like he will want at least a factor of 4, since 3 does not result in
> reduced leverage for twice-average spreads. The factor of 4 would drop us to
> 15.6:1 right now.
>
> ---

>
> A minor issue is whether this factor should apply to the entire leverage
> curve (over all hedges), or whether we are only adjusting the central value,
> so that the max allowed leverage at [redacted] would still be [redacted] regardless of
> the spreads.
>
>
> -dk
>
>
>
>
>

To: Daniel Koranyi[dkoranyi@rentec.com]
Cc: Rob Biggar[rob@rentec.com]; George Heintzelman[georgeh@rentec.com]; Robert Mercer[mercer@rentec.com]; Adrienne[adrienne@rentec.com]; Thomas Fallon[tfallon@rentec.com]; Paul Broder[tpaul@rentec.com]
From: Peter Brown
Sent: Tue 8/23/2011 8:26:51 PM
Importance: Normal
Subject: US portfolio shift - overrides?

Yes, override when you can confidently do so without making a mistake or causing problems for others who you are jumping ahead of.

-Peter

Daniel Koranyi writes:
>
> Rob, George:
>
> Management has decided to shift some portfolio from the Palomino
> loss-protected managed account to the Deutsche (DBAG) loss-protected managed
> accounts. The total amount of portfolio to shift, for now, is USD 4e9.
> This will be achieved by raising the target portfolio for the various dbc00x
> accounts, which will wind up at a leverage of around 12:1 (up from current
> 9.5 or so).
>
> I have built and kicked off standard series in XE and JP that will, combined,
> shift USD 1e9 of portfolio once they are installed and trading. The
> remainder of the shift (USD 3e9) will be in the US. I propose to leave
> snova/sliqd alone and do all the transfer in nova/liqd.
>
> I am fifth in line for a standard US series after the post-alphatest series,
> which is still in =wait status. The parameters to override in production in
> order to transfer the portfolio are, in the nova/liqd complex:
>
> [redacted]
>
> This is an increase of 1e9 for each of them relative to their current values.
>
>
> Peter or Bob, can you please advise Rob and George whether you want them to
> install these overrides in production immediately, or instead wait until the
> five US series are run and unwaited.
>
>
> -dk
>

[redacted] = Redacted by the Permanent Subcommittee on Investigations

Permanent Subcommittee on Investigations
EXHIBIT #5

INVESTMENT ADVISORY AGREEMENT

THIS AGREEMENT is made as of the 30th day of March, 2000, by and between RENAISSANCE TECHNOLOGIES CORP., a corporation organized under the laws of Delaware (the "Advisor"), and FRANCONIA EQUITIES LTD., an exempted company organized under the laws of Bermuda (the "Client").

The Client hereby engages Advisor to perform the investment management services described herein, and Advisor hereby accepts such engagement, pursuant to the following terms and conditions:

1. **Investment Management Services.** The Client hereby authorizes and appoints Advisor to manage the investment of all cash, commodities, securities and other assets comprising the investment portfolio placed under the supervision of Advisor by the Client (which portfolio, together with all additions, withdrawals, substitutions and alterations occurring during the term of this Agreement, is referred to herein as the "Account"). Advisor is authorized, without further approval by or notice to the Client, to make all investment decisions concerning the Account, including allocating any portion of the Account or the entire Account to other investment managers (the "Investment Managers"), and to further authorize such Investment Managers to make purchases and sales and otherwise to effect transactions in securities, commodities, currencies and other assets in the Account (including without limitation entering into short sales and securities lending activities). Advisor is authorized to sign, as attorney-in-fact on behalf of the Client, any documents and take any other actions which Advisor considers necessary or advisable in order to carry out the portfolio allocation or the trading for the Account, including but not limited to the following:

(a) to make all decisions relating to the allocation of the Account to the Investment Managers, including the selection of Investment Managers and amount of allocation, and to delegate such powers to Investment Managers as are necessary or advisable in order to carry out their duties;

(b) to effect (both directly or indirectly through Investment Managers) purchases and sales (including short sales) of (i) securities of any type whatsoever, denominated in any currency, whether or not issued by government entities, partnerships, trusts or corporations, (ii) any put or call options thereon (including the writing of options, whether covered or uncovered), and (iii) other securities and instruments consistent with the Client's investment policies and program;

(c) to make (both directly or indirectly through Investment Managers) all decisions relating to the manner, method and timing of investment transactions, and to select, or to authorize the Investment Managers to select, brokers and dealers for the execution, clearance and settlement of any transactions;

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(b) to effect (both directly or indirectly through Investment Managers) purchases and sales (including short sales) of (i) securities of any type whatsoever, denominated in any currency, whether or not issued by government entities, partnerships, trusts or corporations, (ii) any put or call options thereon (including the writing of options, whether covered or uncovered), and (iii) other securities and instruments consistent with the Client's investment policies and program;

(c) to make (both directly or indirectly through Investment Managers) all decisions relating to the manner, method and timing of investment transactions, and to select, or to authorize the Investment Managers to select, brokers and dealers for the execution, clearance and settlement of any transactions;

(d) to trade (both directly or indirectly through Investment Managers) on margin, to borrow from banks, brokers or other financial institutions and to pledge assets of the Client in connection therewith;

(e) to direct (both directly or indirectly through Investment Managers) custodians to deliver funds or securities for the purpose of effecting transactions, and to instruct custodians to exercise or abstain from exercising any privilege or right attaching to such assets; and

(f) to make and execute, in the name and on behalf of the Client, all such documents (including, without limitation, customer agreements and other documents in connection with the establishment and maintenance of brokerage accounts) and to take all such other actions as the Investment Advisor considers necessary or advisable to carry out its investment management duties hereunder.

2. **Brokerage.** The Client hereby delegates to Advisor (which power may be further delegated to the Investment Managers) authority to designate the broker or brokers through whom all transactions on behalf of the Account will be made. Advisor (or the Investment Managers) will determine the rate or rates to be paid for brokerage services provided to the Account. In the course of selecting brokers, dealers, banks and financial intermediaries to effect transactions for the Account, Advisor (or the Investment Managers) may agree to such commissions, fees and other charges on behalf of the Account as it (or they) shall deem reasonable in the circumstances, taking into consideration all such factors as Advisor deems (or the Investment Managers deem) relevant, including the quality of research, execution and other services made available to it (or them). It is understood that the cost of such services will not necessarily represent the lowest costs available, that such services may not be used by Advisor (or the Investment Managers) for the exclusive benefit of the Account, and that Advisor is (or the Investment Managers are) under no obligation to combine or arrange orders so as to so reduce charges.

3. **Fees and Expenses.** (a) Advisor will not charge the Client a management or performance fee, it being understood that such fees are subsumed in the management and performance fees charged to Medallion Fund and Medallion USA, LP., and such additional affiliated funds which may from time to time indirectly own all of the shares of the Client.

(b) Advisor shall bear its own overhead and other internal operating costs. Operational expenses of the Client, such as interest, custodial, legal, audit and brokerage fees and any subscription or redemption charges imposed by funds in which the Client invests will be borne by the Client. The Client will also bear indirectly its proportionate share of the fees and expenses of the funds in which it invests. Organizational expenses and start-up costs of the Client will be borne by the Client and will be expensed as incurred.

4. **Investment Activities for the Account of Others.** (a) Advisor and its directors, employees and beneficial owners (and the Investment Managers and their directors, employees and

beneficial owners) may from time to time acquire and dispose of securities or other investment assets for their own accounts, for the accounts of their families, for the account of any entity in which they have a beneficial interest or for the accounts of others for whom they may provide investment advisory or other services (collectively, a "Managed Account"), notwithstanding the fact that the Client may have or may take an investment position for the Account; provided, however, that Advisor (or the Investment Managers) shall not cause the Client to purchase any asset from or sell any asset to Advisor (or the Investment Managers), or any of its (or their) partners or employees or any account or entity controlled by such persons, without the consent of the Client.

(b) It is understood that when Advisor determines (or the Investment Managers determine) that it would be appropriate for the Client and one or more Managed Accounts to participate in an investment opportunity, Advisor (or the Investment Managers) will seek to execute orders for the Client and for such Managed Accounts on an equitable basis. In such situations, Advisor (or the Investment Managers) may place orders for the Client and each Managed Account simultaneously, and if all such orders are not filled at the same price, Advisor (or the Investment Managers) may cause the Client and each Managed Account to pay or receive the average of the prices at which the orders were filled for the Client and all Managed Accounts. If all such orders cannot be fully executed under prevailing market conditions, Advisor (or the Investment Managers) may allocate the securities traded among the Client and the Managed Accounts in a manner which it considers (or they consider) equitable, taking into account the size of the order placed for the Client and each such Managed Account.

5. **Scope of Duties.** The Client recognizes that the opinions, recommendations and actions of Advisor will be based on advice and information deemed to be reliable, but not guaranteed by or to Advisor. Advisor shall have no duties or obligations to the Client pursuant to this Agreement other than as set forth herein, and Advisor shall not be liable to the Client for any act or omission in the absence of gross negligence or willful misconduct.

6. **Indemnification.** The Client shall indemnify Advisor, which shall include solely for purposes of this Section any of its directors, officers, and employees against and hold them harmless from any expense, loss, liability or damage arising out of any claim asserted or threatened to be asserted by any third party, in connection with Advisor's serving or having served as such pursuant to this Agreement; provided, however, that Advisor shall not be entitled to indemnification with respect to any expense, loss, liability or damage which was caused by its own gross negligence, willful misconduct or reckless disregard of its duties hereunder.

7. **Termination.** The Client or Advisor may terminate this Agreement at any time upon written notice, which shall be effective when received by the other party.

8. **Entire Agreement; Binding Effect; Assignment.** This Agreement represents the entire agreement among the parties, shall be binding upon and inure to the benefit of the parties hereto and their respective successors, and their rights and obligations hereunder shall not be

assignable, transferable or delegable without the written consent of the other party hereto. Any attempted assignment, transfer or delegation hereof without such consent shall be void.

9. **Waiver; Modification.** No provision of this Agreement may be waived or modified other than by a writing signed by the party to be charged with such waiver or modification. This Agreement constitutes the entire agreement between the Client and Advisor. Any supplement to this Agreement shall be in writing, signed by the parties hereto.

10. **Governing Law.** This Agreement shall be governed by and construed in accordance with the laws of the State of New York without giving effect to conflicts of laws.

IN WITNESS WHEREOF, the parties have entered into this Agreement as of the day and year first above written.

FRANCONIA EQUITIES LTD.

By: _____
Mark Silber
Vice President and Director

RENAISSANCE TECHNOLOGIES CORP.

By: _____
Mark Silber
Vice President

Deutsche Bank

Deutsche Bank Securities Inc.
31 West 52nd Street
New York, NY 10019

Telephone: 1-212-469-5000

March 14, 2002

FRANCONIA EQUITIES LTD.
C/o of Renaissance Technologies Corp.
800 Third Avenue
New York, NY 10022
Attn: Mark Silber / Carla Volpe Porter
Tel: (212) 486-6780
Fax: (212) 758-7136

"OUTPERFORMANCE" BARRIER OPTION TRANSACTION – Cash Settled, Linear Amortizing Premium – DBSI Reference No. 1244131

Dear Sirs:

The purpose of this letter agreement (this "Confirmation") is to confirm the terms and conditions of the Transaction entered into between **DEUTSCHE BANK AG, LONDON BRANCH** ("Party A") and **FRANCONIA EQUITIES LTD.** ("Party B") on the Trade Date specified below (the "Transaction"). This Confirmation constitutes a "Confirmation" as referred to in the ISDA Master Agreement specified below. This Confirmation constitutes the entire agreement and understanding of the parties with respect to the subject matter and terms of the Transaction and supersedes all prior or contemporaneous written or oral communications with respect thereto.

DEUTSCHE BANK AG IS NOT REGISTERED AS A BROKER DEALER UNDER THE U.S. SECURITIES EXCHANGE ACT OF 1934. DEUTSCHE BANK SECURITIES INC. ("DBSI" or "DESIGNATED AGENT") HAS ACTED SOLELY AS AGENT IN CONNECTION WITH THIS TRANSACTION AND HAS NO OBLIGATION, BY WAY OF ISSUANCE, ENDORSEMENT, GUARANTEE OR OTHERWISE WITH RESPECT TO THE PERFORMANCE OF EITHER PARTY UNDER THE TRANSACTION. DEUTSCHE BANK AG, LONDON BRANCH IS NOT A MEMBER OF THE SECURITIES INVESTOR PROTECTION CORPORATION (SIPC).

The definitions and provisions contained in the 2000 ISDA Definitions (the "Swap Definitions") and in the 1996 ISDA Equity Derivatives Definitions (the "Equity Definitions", and together with the Swap Definitions, the "Definitions"), in each case as published by the International Swaps and Derivatives Association, Inc. are incorporated into this Confirmation. In the event of any inconsistency between the Swap Definitions and the Equity Definitions, the Equity Definitions will govern. In the event of any inconsistency between either set of Definitions and this Confirmation, this Confirmation will govern.

This Confirmation constitutes a "Confirmation" as referred to in, and supplements, forms a part of and is subject to, the ISDA Master Agreement, including the Credit Support Annex, if any, dated as of September 6, 2000 as amended and supplemented from time to time (the "Agreement"), between you and Deutsche Bank AG. All provisions contained in the Agreement govern this Confirmation except as expressly modified below.

"Loss" payment measure and "Second Method" payment method shall apply to this Transaction.

The terms of the particular Transaction to which the Confirmation relates are as follows:

General Terms

Trade Date:	March 14, 2002
Option Style:	Call
Option Type:	American– Barrier Option
Buyer:	**Party B**
Seller:	**Party A**
Basket; Benchmark Shares:	Two specified accounts owned by Party A, one relating to the Basket, the other relating to the Benchmark Shares, each having the respective Basket Composition and Benchmark Share Composition provided in Annex I.

The **Benchmark Share Composition** shall be subject to adjustment (through Share additions and/or deletions) from time to time solely in connection with any "Benchmark Share Recomposition" (defined below).

The Basket shall be comprised of the Trading Basket and the Semi-fixed Basket (as defined below). For purposes of calculating Funding Costs (as defined below), the Basket will be subdivided into--

(i) A **"Trading Basket"**, the Share composition of which shall be comprised of the Designated Positions, as such term is defined in Section 2 of the Investment Advisory Agreement (consistent with the Investment Guidelines applicable to the Advisor--as described below); the Share positions within the Trading Basket shall be further subdivided into (A) **"Trading Basket Long Positions"**,(B) **"Trading Basket Actual Short Positions,** and (C)**"Trading Basket Synthetic Short Positions"** -- designation of a Share position as a "Trading Basket Synthetic Short Position" shall not denote that such Share position is actually held "short", for applicable regulatory purposes (including application of U.S. Short Sale Rules) or otherwise; rather such designation as a "Synthetic Short Position" shall only have relevance for purposes of calculating and categorizing relevant Share positions for purposes of determining applicable Funding Costs; and

(ii) A **"Semi-fixed Basket"**, the Share composition of which is intended at all times to be equivalent to, and correspond to, the Share composition of the Benchmark Shares (as the latter is adjusted from time to time to reflect any corresponding Benchmark Recomposition).

Exchange:	N/A
Related Exchange(s):	N/A
Business Day:	New York

Transaction Details

Number of Options:	One
Notional Amount:	USD 3,000,000,000.00
Option Entitlement:	One Basket per Option
Strike Price:	100
Premium:	Initially, USD 375,000,000.00, of which USD 105,000,000.00 constitutes "Amortizable Premium". Premium is the sum of Amortizable Premium (initially, and throughout, USD 105,000,000.00) plus Fixed Premium (initially USD 270,000,000.00).
Premium Payment Date:	The third Business Day after the Trade Date.
Calculation Agent:	Designated Agent

Procedure for Exercise

Commencement Date of Exercise Period:	The Trade Date. For the avoidance of doubt, Buyer's designation of an Exercise Date shall thereby trigger the commencement of the Averaging Period on such Exercise Date.
Exercise Period:	The period commencing on, and including, the Trade Date up to, and including, the Scheduled Expiration Date.
Latest Exercise Time:	**5:00 p.m. (New York time)**, provided that no Early Termination Event has occurred.
Exercise Date:	The Exchange Business Day immediately following the date on which Seller confirms its receipt of the written notice of exercise to be provided by Buyer.
Expiration Date:	**March 14, 2005**, subject to Following Business Day Convention ("Scheduled Expiration Date") or such earlier date and time upon the occurrence of an Early Termination Event. Buyer shall effect option exercise, if at all, no later than the commencement of the Averaging Period relating to the Scheduled Expiration Date.
Automatic Exercise:	Applicable as at the Expiration Date to the extent that the value of the Cash Settlement Amount, as determined by the Calculation Agent, is a positive number.

Designated Agent's Telephone Number, Facsimile Number and Contact Details for Purposes of Giving Notice to Seller:
Attn: Designated Agent--James Rowen
Tel: (212) 469-4990
Fax: (212) 469-4955

Valuation

Valuation Time:	As specified in ANNEX I for the relevant Exchange, subject to an Early Termination Event.
Valuation Date(s):	Any Exchange Business Day during the Exercise Period.
Final Valuation Date:	The last Exchange Business Day (i.e., the last Averaging Date) of the Averaging Period, subject to any Early Termination Event.
Averaging Period:	A period of four (4) consecutive Exchange Business Days (each being an Averaging Date), commencing on the relevant Exercise Date; provided that, if an Early Termination Event has occurred and the Seller has not received a Buyer Termination Notice (defined below) from the Buyer, the commencement of the Averaging Period, will be as determined by the Calculation Agent at such time.
Settlement Terms:	Cash Settlement
Net NAV Index Level	As of the Trade Date, the Strike Price, and as of any Valuation Date during the Exercise Period, an amount determined as follows: (i) Gross NAV Index Level **minus** Benchmark Index Level (ii) **plus 100**
Net NAV Amount:	As of the relevant Valuation Date, an amount equal to the product of (i) the Notional Amount and (ii) the Net NAV Index Level **minus** 100 **divided** by 100
Gross NAV Index Level:	As of the Trade Date, the Strike Price; and as of any Valuation Date during the Exercise Period, an amount (which may be a positive or negative number) determined as follows: (i) Strike Price **plus** (ii) Basket Base Performance **divided by** the Notional Amount and **multiplied by one hundred (100).**
Benchmark Index Level	As of any Valuation Date (i) Cumulative Benchmark Percentage **multiplied** by 100 **(ii) plus 100**

Barrier NAV Amount:	As of each Exchange Business Day during the Term of this Transaction, an amount equal to the Net NAV Amount **minus** the Total Amortized Premium.
Barrier NAV Index Level:	As of the Trade Date, the Strike Price; and as of any Valuation Date during the Exercise Period, an amount (which may be a positive or negative number) determined as follows: **(i)** Strike Price **plus** **(ii)** Barrier NAV Amount **divided by** the Notional Amount and **multiplied by one hundred (100)**
Settlement Price:	In connection with any exercise of this Option Transaction by Buyer the Share Pricing Method shall be the actual trade execution pricing for selling and/or acquiring the Shares composing the Trading Basket ("Share Execution Price").
Expiration Price:	91.00 Notwithstanding anything set forth herein to the contrary, if, at any time during the term of this Transaction, the Calculation Agent reasonably determines that the Barrier NAV Index Level is at or below 97.00 (the "Expiration Threshold Price") but above the Expiration Price, the Seller shall have the right to deliver to the Buyer an Early Expiration Notice (defined below) pursuant to the terms and conditions set forth herein.
Cash Settlement Amount:	With respect to a Valuation Date, the **greater of** (1) zero and (2) an amount, as calculated by the Calculation Agent, equal to the **sum of** (A)(i) Net NAV Index Level **minus** 100 (ii) **divided by** 100 (iii) **multiplied by** the Notional Amount **plus** (B) the Premium Settlement Amount (if any) (defined below).
Cash Settlement Payment Date:	With respect to an Exercise Date, or Early Termination Date, **three (3)** Exchange Business Days after the Final Valuation Date.
Adjustments For Potential Adjustment Events:	Calculation Agent Adjustment (as defined below)
Consequences of Merger Events:	Calculation Agent Adjustment (as defined below)
Nationalization or Insolvency:	Calculation Agent Adjustment (as defined below)
Calculation Agent Adjustment:	For purposes of Adjustments for Potential Adjustment Events, Consequences of Merger Events and Nationalization or Insolvency, all with respect to the relevant Shares composing the Basket from time to time, the Calculation Agent will make such adjustments to the Share price, the then applicable Basket Base Performance, the Net NAV Index Level and any other

variable relevant to the exercise, settlement or payment terms of the Transaction, as the Calculation Agent determines appropriate in its good faith commercially reasonable judgment, with reference (as deemed appropriate) to any relevant adjustment rules and precedents in effect for any primary options exchange for exchange-traded options contracts on the relevant affected Shares and in consultation with Party B.

Additional Terms – Early Expiration Event/Early Termination Event

The following additional terms shall apply to this Transaction.

1. General. This Transaction constitutes a Barrier Option. In addition, this Transaction will be deemed to have, and will, expire on the date and at the time on which a valid Early Expiration Notice, which is not subsequently revoked in accordance with the provisions set forth below, is promptly delivered to the Buyer by the Seller ("Early Termination Event" and "Early Termination Date", respectively).

Early Expiration Event. Notwithstanding anything set forth herein to the contrary, if, at any time during the term of this Transaction, the Calculation Agent reasonably determines that the Barrier NAV Index Level is less than or equal to the Expiration Threshold Price, an Early Expiration Event shall be deemed to have occurred.

Upon the occurrence of an Early Expiration Event, the Seller shall have the right, but not the obligation, to deliver to the Buyer, promptly after the occurrence of such Early Expiration Event, an Early Expiration Notice (defined below).

"Early Expiration Notice" shall mean a notice in the form of Annex II hereto, or other communication of the details included in the form attached hereto as Annex II, delivered by the Seller to the Buyer by telephone or facsimile communication as determined appropriate under the circumstances by Seller, whereby Seller has made its best efforts (i) to place such telephone call to Buyer and (ii) to transmit such Notice by facsimile communication and (iii) by e-mail, in all cases between the hours of 9 a.m. and 5 p.m. (New York time) on any Exchange Business Day and irrespective of whether such notice or communication is actually received by Buyer. **The Early Expiration Notice may be delivered prior to (but in immediate anticipation of) an Early Expiration Event and the Seller reserves the right to revoke such Early Expiration Notice (including any Buyer Termination Notice delivered in connection therewith) if the Calculation Agent determines that the Barrier NAV Index Level is above the Expiration Threshold Price; unless the Buyer has notified the Seller of its intention not to deliver the Buyer Termination Notice, in which case the Early Expiration Notice will remain in effect.**

If the Seller has delivered an Early Expiration Notice to the Buyer, the Buyer shall promptly (i) provide the Seller with a notice in the form specified in Annex III (the "Buyer Termination Notice") or (ii) inform the Seller of its intention not to provide the Seller with the Buyer Termination Notice.

If an Early Termination Event has occurred and the Buyer either fails promptly to act in accordance with the preceding paragraph or informs the Seller of its intention not to provide the Seller with the Buyer Termination Notice, the Seller shall, on the applicable Cash Settlement Payment Date, pay to the Buyer the Cash Settlement Amount, if any, in accordance with the Valuation and Settlement Terms set forth above for this Transaction.

If the Buyer delivers to the Seller the Buyer Termination Notice and such notice is not subsequently revoked in accordance with the provisions set forth above, (i) the Buyer (or an affiliate of the Buyer reasonably acceptable to the Seller) shall promptly sell and transfer to the Seller and the Seller shall acquire from the Buyer (or an affiliate of the Buyer reasonably acceptable to the Seller) shares in the absolute number and type corresponding to (A) the short positions included within the Trading Basket

Actual Short Positions, and (B) the short positions designated as the Trading Basket Synthetic Short Positions, at such time (the "Transferred Short Position Shares"), in consideration of the then current market value (as may be reasonably adjusted by the Calculation Agent) of such shares (the "Short Position Consideration" and the "Short Position Sale", respectively), (ii) simultaneously, the Seller shall promptly sell and transfer to the Buyer (or an affiliate of the Buyer reasonably acceptable to the Seller) and the Buyer (or an affiliate of the Buyer reasonably acceptable to the Seller) shall acquire from the Seller all of the long positions included within the Trading Basket Long Positions at the time of such transfer (the "Transferred Long Position Shares"), in consideration of an amount (the "Long Position Consideration") equal to the greater of (A) the sum of the respective market values (as may be reasonably adjusted by the Calculation Agent) of each of the Transferred Long Position Shares at the time transferred to the Buyer pursuant to this paragraph, and (B) the minimum amount that would have been received by the Seller upon a sale of all of the Transferred Long Position Shares that would cause the Barrier NAV Index Level to be equal, immediately following such sale, and assuming that the Short Position Sale were effected immediately prior to such sale, to the Expiration Price, and (iii) the Cash Settlement Amount will be computed based on the Short Position Consideration and the Long Position Consideration pursuant to subsections (i) and (ii) above, respectively.

2. Further Definitions:

"Premium Settlement Amount" means the original Premium **minus** the Total Amortized Premium **minus** **USD 100,000.00 (the advisory fee).**

"Total Amortized Premium" means the sum of the Amortized Daily Premium for each calendar day from but excluding the Trade Date to and including the **earliest of** any date of determination, the Exercise Date, the scheduled Expiration Date and/or the Early Termination Date.

"Amortized Daily Premium" means Amortizable Premium **divided** by the total number of days in the Exercise Period.

The Basket--

"Basket Base Performance" means the sum of (i) Basket Gains and Losses **plus** (ii) Basket Income and Expenses.

"Basket Gains and Losses" means (i) realized and unrealized gains in respect of the Shares composing the Basket from time to time **minus** (ii) realized and unrealized losses in respect of the Shares composing the Basket from time to time.

"Basket Income and Expenses" means (i) the sum of (A) dividend income (determined based on ex-dividend dates which have occurred within the Exercise Period) net of any tax withheld at source as a result of the occurrence of any of the events described in the "Additional Tax Event" provisions set forth below **plus** (B) interest income (on an accrual basis); **plus** (C) the product of (x) the Rebate Share Value **multiplied** by (y) either the Debit Rate less the applicable Spread (as specified in Schedule B below) in respect of the current Notional (as defined in Schedules A and B below) or, in the case of any Hard-to-Borrow Shares, the actual rebate rate received **plus** (D) Total Amortized Premium (as of any date of determination) **plus** (E) total interest income received and receivable at the Debit Rate **minus** 25 basis points (0.25%) on the Basket Credit Balance (as defined below) **minus** (ii) the sum of (A) total accrued and paid interest expense at the Debit Rate **plus** the applicable Spread (as specified in Schedule A below) in respect of the current Notional (from and including Trade Date to and including the relevant determination date) on the Basket Debit Balance (defined below) **plus** (B) Benchmark Funding Costs (defined below) **plus** (C) dividend costs (determined based on ex-dividend dates which have then occurred within the Exercise Period), net of any tax withheld at source as a result of the occurrence of any of the events described in the "Additional Tax Event" provisions set forth below **plus** (D) interest expenses excluding accrued interest expenses on Basket Debit Balance **plus** (E) other expenses enumerated in the Basket/Benchmark Performance Report.

"Basket/Benchmark Performance Report" means a periodic transaction report prepared and compiled by the Calculation Agent, based on transaction information and pricing received from the Investment Advisor setting forth (among other things) the Basket Base Performance, Benchmark Value and any Benchmark Share Recomposition for the relevant Valuation Date. The most current Basket Performance Report as of any date shall be available to Buyer upon request.

"Debit Rate" means as of any day the **FEDOPEN Rate** for such day (or if such day is not a Business Day as of the preceding Business Day) determined by reference to the **FEDOPEN Index** as published by the Federal Reserve and as disseminated via Bloomberg.

"Hard-to-Borrow Shares" means, as determined by the Calculation Agent, any Shares comprising the Basket from time to time for which the market rebate rate is lower than the normal rebate rate received on "general collateral" shares in connection with a theoretical stock borrow arrangement.

Funding Costs (All Funding Cost determinations shall be made on a Share "settlement date" basis) --

"Basket Debit Balance" means to the extent that the aggregate of: (i) "cost basis" of the Trading Basket Long Positions, **plus** (ii) cumulative realized losses on any Basket Shares, **minus** (iii) cumulative realized gains on any Basket Shares, **plus** (iv) the absolute value of the Rebate Share Value **minus** (v) the absolute value of the actual sale price(s) for the Synthetic Short Positions and the Actual Short Positions **exceeds** the Premium.

"Basket Credit Balance" means to the extent that the Premium **exceeds** the aggregate of: (i) "cost basis" of the Trading Basket Long Positions, **plus** (ii) cumulative realized losses on any Basket Shares, **minus** (iii) cumulative realized gains on any Basket Shares, **plus** (iv) the absolute value of the Rebate Share Value **minus** (v) the absolute value of the actual sale price(s) for the Synthetic Short Positions and the Actual Short Positions.

"Benchmark Funding Costs" means the **product of the Net Benchmark Cost Basis of all Benchmark Shares, from time to time, multiplied by 13 basis points per annum, calculated on an A/365 day basis.**

"Net Benchmark Cost Basis" means (i) the "cost basis" of all Benchmark Shares, from time to time, **minus** (ii) the actual sale price(s) of Basket Shares from time to time comprising the Trading Basket Synthetic Short Positions.

"Rebate Share Value" means (i) the market value from time to time of the Trading Basket Synthetic Short Positions **plus** (ii) the market value from time to time of the Trading Basket Actual Short Positions.

"Trading Basket Actual Short Position(s)" ("Actual Short Positions") means held as actual "short" positions in the Trading Basket from time to time.

"Trading Basket Synthetic Short Position(s)" ("Synthetic Short Positions") means those Basket Share positions from time to time in the Trading Basket which are so designated for purposes of determining applicable Funding Costs, which designation shall in no event imply that the particular Share position is actually held "short" in the Basket.

The Benchmark--Benchmark Shares--
"Benchmark Closing Value" means, as of any Valuation Date, the market value of the Benchmark Closing Shares (defined below)--including any non-reinvested cash proceeds relating to any liquidation of Benchmark Opening Shares (defined below) relating to such then current Valuation Date-- all as determined based on the then current Exchange Business Day closing prices, and any actual Share execution prices (including any Benchmark Share Recompositions) for all Share trades executed prior to the opening of trading on the relevant Exchange on the immediately following Valuation Date, in all cases using the Share Pricing Method set forth on Annex I hereto.

"Benchmark Opening Value" means the Benchmark Closing Value for the immediately preceding Valuation Date, with such adjustments as deemed appropriate by the Calculation Agent to take account of any Basket Share Recomposition.

"Benchmark Opening Shares" means, for purposes of calculating the Benchmark Opening Value on any Valuation Date, the Benchmark Closing Shares included in the calculation of the Benchmark Closing Value for the immediately preceding Valuation Date.

"Benchmark Closing Shares" means, for purposes of calculating the Benchmark Closing Value on any Valuation Date, the Benchmark Opening Shares, with such adjustments (additions and deletions) to reflect any Share trading activity for the daily period: (i) from and after the end of the determination period for calculating the Benchmark Opening Value for such current Valuation Date, (ii) through the period ending immediately prior to the official scheduled opening of trading on the relevant Exchange on such current Valuation Date.

"Benchmark Value Change" ("Daily BVC") means, as determined as of any Valuation Date: (i) the Benchmark Closing Value **minus** the Benchmark Opening Value (ii) **plus** aggregate dividend amounts for any Benchmark Shares which have gone "ex dividend" on such Valuation Date.

"Benchmark Share Recomposition" means an election from time to time by the Investment Advisor (defined below) in consultation with the Calculation Agent to change the composition of the Benchmark Shares (through additions and/or deletions of Benchmark Shares). Any such Benchmark Recomposition may occur without the consent of the Buyer, provided that Seller shall give Buyer prior notice of such event, and each such Benchmark Recomposition shall be reflected in the Basket/Benchmark Performance Report.

"Cumulative Benchmark Value Change" ("Cumulative BVC") means, as determined as of any Valuation Date, the sum of all the Daily BVC values up to and including the relevant Valuation Date.

"Cumulative Benchmark Percentage" (or "Cumulative BP") means as determined as of each Valuation Date, the Cumulative BVC **divided** by the Notional Amount.

SCHEDULES --

For purposes of "Schedule A" and "Schedule B" below, the term "Notional" shall mean, as of the relevant date of determination, the aggregate sum of (1) the absolute value of the market value of positions held long and (2) the absolute value of the market value of positions held short, as determined by the Calculation Agent in respect of all transactions of a similar type to this Transaction (i.e., any Outperformance Barrier Option Transaction in respect of which the underlying Basket is managed by the same Investment Advisor as defined below) entered into between Buyer and Seller as of such relevant date of determination. The Spread in Schedule A and Schedule B may be adjusted from time to time by mutual consent of Party A and Party B, acting in good faith and in a commercially reasonable manner.

Schedule A (long)

Level	Notional	Spread
Level 1	Under 1 billion	30 basis points
Level 2	> = 1 billion < 1.5 billion	28 basis points
Level 3	> = 1.5 billion < 2 billion	25 basis points
Level 4	> = 2 billion	23 basis points

to

Schedule B (short)

Level	Notional	Spread
Level 1	Under 1 billion	30 basis points
Level 2	> = 1 billion < 1.5 billion	28 basis points
Level 3	> = 1.5 billion < 2 billion	25 basis points
Level 4	> = 2 billion	23 basis points

Additional Representations:

Buyer and Seller each make (and as indicated, Buyer makes) the following additional representations:

(i) it is entering into the Transaction as principal and not as agent or in any other capacity, fiduciary or otherwise and no other person has an interest herein.

(ii) it has, in connection with the Transaction (a) the knowledge and sophistication to independently appraise and understand the financial and legal terms and conditions of the Transaction and to assume the economic consequences and risks thereof and has, in fact, done so as a result of arm's length dealings with the other party; (b) to the extent necessary, consulted with its own independent financial, legal or other advisors and has made its own investment, hedging and trading decisions in connection with the Transaction based upon its own judgment and the advice of such advisors and not upon any view expressed by the other party; (c) not relied upon any representation (whether written or oral) of the other party, other than the representations expressly set forth hereunder and is not in any fiduciary relationship with the other party; (d) not obtained from the other party (directly or indirectly through any other person) any advice, counsel or assurances as to the expected or projected success, profitability, performance, results or benefits of the Transaction; and (e) determined to its satisfaction whether or not the rates, prices or amounts and other economic terms of the Transaction and the indicative quotations (if any) provided by the other party reflect those in the relevant market for similar transactions.

(iii) it is not a private customer (as defined in the Rules of The Securities and Futures Authority).

(iv) it understands that the offer and sale of the Options(s) constituting the Transaction is intended to be exempt from registration under the US Securities Act of 1933, as amended (the "Securities Act"), by virtue of Section 4(2) thereof. In furtherance thereof, it represents and warrants that (a) it is experienced in investing in or otherwise entering into options and other financial instruments similar to the Transaction and has determined that the Transaction is a suitable investment for it, and (b) it is an institution which qualifies as an "accredited investor" or "qualified institutional buyer" as such terms are defined under relevant regulations promulgated under the Securities Act.

(v) Buyer understands and specifically acknowledges and agrees that the composition of the Basket and the Benchmark Shares as well as the Basket Base Performance and Benchmark Value Change (and Cumulative Benchmark Performance) shall be under the sole discretionary trading authority of **Renaissance Technologies Corp.** (the "Investment Advisor"), an investment advisor independent of Seller, which Investment Advisor will manage the composition of the Basket and the Benchmark Shares for the account of Seller from time to time pursuant to the Investment Objectives, Guidelines and Restrictions set forth in (and the further terms of) an Investment Advisory Agreement dated as of **March 14, 2002** between Seller (or its specified affiliate) and the Investment Advisor ("Advisor Agreement"). A copy of such Advisor Agreement has been previously made available to, and has been reviewed by, Buyer. Buyer has obtained all the information it desires regarding the Investment Advisor. Buyer agrees and acknowledges that neither Seller nor the Designated Agent take any responsibility for such information. The Buyer has made an independent judgment of the experience and expertise of the

Investment Advisor.

If Applicable: (vi) Buyer is a "foreign person" for purposes of Section 7701(a) of the Internal Revenue Code of 1986, as amended.

Additional Provisions:

Investment Advisor: Buyer acknowledges that the Investment Advisor has been engaged by Seller to manage the Basket on a discretionary basis for the account of Seller. While Seller shall in the normal course of its business review Investment Advisor's compliance with the Investment Objectives, Guidelines and Restrictions, Seller shall have no liability to Buyer – and Buyer hereby waives any rights of action against Seller – in connection with Investment Advisor's non-compliance with said Investment Objectives, Guidelines and Restrictions – or any other terms of the Advisor Agreement. Other than as provided above, Buyer agrees that it shall not contact directly the Investment Advisor regarding the terms or subject matter of this Transaction.

Tax Conditions

Change in Definition of Indemnifiable Tax: Solely for the purposes of this Transaction, the term Indemnifiable Tax will be defined to exclude any tax imposed on, any payment under this Transaction that is based on, related to, in respect of, or measured by, in whole or in part, the declaration, payment or receipt of any dividend on any Shares comprising from time to time the Basket.

Additional Tax Event: If during the term of the Transaction (and solely with respect to this Transaction), as a result of any event described in clauses (x) or (y) of Section 5(b)(ii) of the Agreement, Party A determines (in its sole good faith determination, with prompt notification to Party B) that it is under an obligation to withhold or remit any tax on account of, or relating to, the declaration, payment or receipt of any dividend on any Shares comprising from time to time the Basket (and in such circumstance will withhold or remit such tax as required), or otherwise receives dividends on such Shares net of withholding tax, due to the relationship between Party A and Party B as the respective Seller and Buyer under this Transaction, where such withholding or remittance would impact, directly or indirectly, the Net NAV Index Level, then Party B shall be the sole Affected Party.

GOVERNING LAW: THIS CONFIRMATION WILL BE GOVERNED BY AND CONSTRUED IN ACCORDANCE WITH THE LAWS OF THE STATE OF NEW YORK (WITHOUT REFERENCE TO CHOICE OF LAW DOCTRINE).

The time of dealing will be confirmed by Party A upon written request.

Deutsche Bank AG, London Branch is regulated by the Securities and Futures Authority.

Account Details:

Payment to **Party A:**	The Bank of NY ABA 021-000-018 Account # 8900-353570 Account Deutsche Bank
Payment to **Party B:**	**[To be advised]**

Contact Particulars for Party A:

Confirmations:	Tarana Oommen
Telephone:	(212) 469-2786
Fax No.:	(212) 469-5220
Payments/Fixings:	Natalie Bates
Telephone:	(212) 469-5862
Fax No.:	(212) 469-4992
Basket Base Performance; Net NAV Index Levels; Basket Performance Reports:	Thomas E. Kerns/Vince Pfalzer
Telephone:	(212) 469-4928
Fax No.:	(212) 469-4994
Early Expiration Event/Notice:	James Rowen/Julian Sale
Telephone:	(212) 469-4990
Fax No.:	(212) 469-4955

Contact Particulars for Party B:

Early Expiration Event/Notice:	Peter Brown Bob Mercer	Mike O'Rourke Mark Silber Carla Volpe Porter Bruce Yablon
Telephone:	(631) 444-7000	(212) 486 -6780
Fax:	(631) 689-4495	(212) 758-7136
Basket Base Performance; Net NAV Index Levels; Basket Performance Reports:	Mike O'Rourke Scott Chinsky	
Telephone:	(212) 486-6780	
Fax No.:	(212) 486-7291	
Confirmations:	Mark Silber / Carla Volpe Porter / Bruce Yablon	
Telephone:	(212) 486-6780	
Fax No.:	(212)758-7136	

Each Party has agreed to make payments to the other in accordance with this Confirmation. Please confirm that the foregoing correctly sets forth the terms of our agreement by sending a return executed acknowledgment hereof to such effect to the attention of **Tarana Oommen, Structured Equities Group (Fax No. (212) 469-5220)**.

We are very pleased to have concluded this Transaction with you.

Regards,

DEUTSCHE BANK AG LONDON

By: _____
Name: ~~James Rowen~~ Julian Sale
Title: Attorney-in-Fact

By: _____
Name: Tarana Oommen
Title: Attorney-in-Fact

Reviewed By:

_____
Keith Angell

_____
Julian Sale

DEUTSCHE BANK SECURITIES INC.,
acting solely as Agent in connection with
this Transaction

By: _____
Name: ~~James Rowen~~ Julian Sale
Title: Managing Director

By: _____
Name: Tarana Oommen
Title: Vice President

Confirmed and Acknowledged as of the date first above written:

FRANCONIA EQUITIES LTD.

By: _____
Name: MARK SILBER
Title: DIRECTOR

MOSEL EQUITIES L.P.

LIMITED PARTNERSHIP AGREEMENT

October 26, 2007

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MOSEL EQUITIES L.P.

LIMITED PARTNERSHIP AGREEMENT

This Limited Partnership Agreement is made effective as of the 26th day of October, 2007 by and among the person whose name is subscribed at the end hereof as general partner and those persons whose names are subscribed at the end hereof as limited partners.

ARTICLE I.

DEFINITIONS

For purposes of this Agreement:

"Act" means the Delaware Revised Uniform Limited Partnership Act, as in effect on the date hereof, and as amended from time to time, or any successor law.

"Agreement" means this Limited Partnership Agreement, as amended from time to time.

"Capital Account" means with respect to each Partner the capital account established and maintained on behalf of such Partner as described in Section 3.3.

"Certificate" means the certificate of limited partnership referred to in Section 2.1.

"Code" means the Internal Revenue Code of 1986, as amended and as hereafter amended, or any successor law.

"Fiscal Period" means the period which starts on October 26, 2007 and thereafter each period which starts on the day immediately following the last day of the preceding Fiscal Period, and which ends on the first to occur of (a) the last day of any fiscal quarter, or (b) any other date as of which any withdrawal or distribution of capital is made by or to any Partners or as of which a contribution to capital is accepted by the Partnership from any new or existing Partner, other than any withdrawal, distribution or contribution which does not result in any change of any Partner's Partnership Percentage.

"Fiscal Year" means each period commencing on January 1 of each year and ending on December 31 of each year (or on the date of a final distribution pursuant to Section 6.1(a)(iii)), unless the General Partner shall elect another fiscal year for the Partnership which is a permissible tax year under the Code.

"General Partner" means Renaissance Technologies LLC, a corporation organized under the laws of the State of Delaware, or any successor to the business of the General Partner.

"Limited Partner" means each of Medallion Fund L.P., Medallion Associates L.P., Medallion International Ltd., Medallion USA L.P., Medallion Capital Investments Ltd. and Medallion RMP Fund L.P., and any other person executing this Agreement as a Limited Partner until the entire limited partnership interest of any such person has been withdrawn pursuant to Section 5.5 or a substitute Limited Partner or Partners are admitted with respect to such person's entire limited partnership interest.

"Net Assets" means the total value, as determined by the General Partner in accordance with Section 7.2, of all assets of the Partnership (including any net unrealized appreciation or depreciation of securities held directly by the Partnership and accrued interest and dividends receivable net of withholding taxes), less an amount equal to all accrued debts, liabilities and obligations of the Partnership (including any reserves for contingencies established by the General Partner.

"Net Loss" means the excess of the Net Assets on the first day of a Fiscal Period over the Net Assets on the last day of the same Fiscal Period, after excluding in each case the effects of additional capital contributions, withdrawals or distributions during the period.

"Net Profit" means the excess of the Net Assets on the last day of a Fiscal Period over the Net Assets on the first day of the same Fiscal Period, after excluding in each case the effects of additional capital contributions, withdrawals or distributions during the period.

"Partner" means the General Partner or any of the Limited Partners, except as otherwise expressly provided herein, and "Partners" means the General Partner and all of the Limited Partners.

"Partnership" means the limited partnership governed by this Agreement.

"Partnership Percentage" means a percentage established for each Partner on the Partnership's books as of the first day of each Fiscal Period. The Partnership Percentage of a Partner for a Fiscal Period shall be determined by dividing the amount of the Partner's Capital Account as of the beginning of the Fiscal Period (after adjustment for any contributions to the capital of the Partnership which are effective on such date) by the sum of the Capital Accounts of all of the Partners as of the beginning of the Fiscal Period (after adjustment for any contributions to the capital of the Partnership which are effective on such date). The sum of the Partnership Percentages of all Partners for each Fiscal Period shall equal one hundred percent (100%).

ARTICLE II.

ORGANIZATION

2.1 Formation of Limited Partnership.

(a) The Certificate of Limited Partnership was filed with the Secretary of State of Delaware and the Partnership formed under and pursuant to the Act on October 26, 2007.

(b) The General Partner shall execute, acknowledge and file any amendments to the Certificate as may be required by the Act and any other instruments, documents and certificates which, in the opinion of the Partnership's legal counsel, may from time to time be required by the laws of the United States of America, the State of Delaware or any other jurisdiction in which the Partnership shall determine to do business, or any political subdivision or agency thereof, or which such legal counsel may deem necessary or appropriate to effectuate, implement and continue the valid and subsisting existence and business of the Partnership. Any required amendment to the Certificate shall be filed by the General Partner promptly following the event requiring said amendment. All amendments may be signed either personally or by an attorney-in-fact.

2.2 Name of Partnership.

The name of the Partnership shall be Mosel Equities L.P. or such other name as the General Partner may hereafter adopt upon causing an amendment to the Certificate to be filed with the Secretary of State of the State of Delaware. The Partnership shall have the exclusive ownership and right to use the Partnership name so long as the Partnership continues, despite the withdrawal, expulsion, resignation or removal of any Partner, but upon the Partnership's termination, the Partnership shall assign such name and the goodwill attached thereto to the General Partner.

2.3 Registered Office and Agent.

The Partnership shall have its registered office at 1209 Orange Street, City of Wilmington, County of New Castle or at such other place as the General Partner may designate from time to time, and its initial registered agent in Delaware shall be Corporation Trust Company.

2.4 Objectives of Partnership.

The objectives of the Partnership shall be to purchase, sell (including short sales), invest, trade and deal in securities and other financial instruments, including options or other derivative instruments, and to engage in financial transactions relating thereto.

2.5 Actions by Partnership.

The Partnership may execute, deliver and perform all contracts, agreements and other undertakings and engage in all activities and transactions as may in the opinion of the General Partner be necessary or advisable to carry out the foregoing objectives.

ARTICLE III.

CAPITAL

3.1 Contributions to Capital.

(a) The General Partner may permit any Partner, including any additional Partner admitted pursuant to Section 5.1, to make additional capital contributions. No other contribution to the capital of the Partnership may be made by any Partner unless such contribution shall have been approved in advance in writing by the General Partner.

(b) Except as otherwise permitted by the General Partner, all contributions to the capital of the Partnership by any Partner shall be payable in cash or in such securities which the General Partner may agree to accept on behalf of the Partnership.

3.2 Rights of Partners in Capital.

(a) No Partner shall be entitled to interest on his contributions to the capital of the Partnership.

(b) No Partner shall have the right to distributions or the return of any contribution to the capital of the Partnership except (i) upon withdrawal of such Partner pursuant to Section 5.5, (ii) upon the dissolution of the Partnership pursuant to Section 6.1 or (iii) as provided in Section 3.6. The entitlement to any such return at such time shall be limited to the value of the Capital Account of the Partner. The General Partner shall not be liable for the return of any such amounts.

3.3 Capital Accounts.

(a) The Partnership shall maintain a separate Capital Account for each Partner.

(b) Each Partner's Capital Account shall have an initial balance equal to the amount of cash and the value of any securities constituting such Partner's initial contribution to the capital of the Partnership.

(c) Each Partner's Capital Account shall be increased by the sum of (i) the amount of any additional contributions by such Partner to the capital of the Partnership pursuant to Section 3.1, plus (ii) the portion of any Net Profit allocated to such Partner's Capital Account pursuant to Section 3.4.

(d) Each Partner's Capital Account shall be reduced by the sum of (i) the amount of any withdrawals or distributions to such Partner pursuant to Sections 3.6, 5.5 or 6.1, plus (ii) the portion of any Net Loss allocated to such Partner's Capital Account pursuant to Section 3.4.

3.4 Allocation of Net Profit and Net Loss.

As of the last day of each Fiscal Period, any Net Profit or Net Loss for the Fiscal Period shall be allocated among and credited to or debited against the Capital Accounts of the Partners in proportion to their respective Partnership Percentages for the Fiscal Period.

3.5 Allocations for Income Tax Purposes.

In each Fiscal Year, items of income, deduction, gain, loss or credit that are recognized for income tax purposes shall be allocated among the Partners, General and Limited, in such manner as to reflect equitably amounts credited to or debited against each Partner's Capital Account, whether in such Fiscal Year or in prior Fiscal Years. To this end, the Partnership shall establish and maintain records which shall show the extent to which the Capital Account of each Partner shall, as of the last day of each Fiscal Year, be comprised of amounts which have not been reflected in the taxable income of such Partner. To the extent deemed by the General Partner to be feasible and equitable, taxable income and gains in each Fiscal Year shall be allocated among the Partners who have enjoyed the related credits, and items of deduction, loss and credit in each Fiscal Year shall be allocated among the Partners who have borne the burden of the related debits. Taxable gain or loss realized from the sale of securities which were contributed in kind by a Partner (other than gain which was recognized by such contributing Partner upon such contribution pursuant to Section 721(b) of the Code) shall be allocated to the contributing Partner to the extent required under Section 704(c) of the Code and the regulations promulgated thereunder.

3.6 Distributions.

The General Partner may make distributions in its discretion. All distributions pursuant to this Section 3.6 shall be made to the Partners pro rata in proportion to their Partnership Percentages.

ARTICLE IV.

MANAGEMENT

4.1 Rights, Duties and Powers of the General Partner.

(a) Subject to the terms and conditions of this Agreement, the General Partner shall have complete and exclusive responsibility for managing and administering the affairs of the Partnership, and shall have the power and authority to do all things necessary or proper to carry out its duties hereunder.

(b) Without limiting the generality of the General Partner's duties and obligations hereunder, the General Partner shall have full power and authority:

(i) to open, maintain and close bank accounts and custodial accounts for the Partnership and draw checks and other orders for the payment of money;

(ii) to receive from Partners contributions to the capital of the Partnership;

(iii) to pay all expenses relating to the organization of the Partnership.

(iv) to engage such attorneys, accountants and other professional advisers and consultants as the General Partner may deem necessary or advisable for the affairs of the Partnership;

(v) to maintain the books and records of the Partnership, and cause to be prepared an annual audited balance sheet and income statement and periodic unaudited financial statements;

(vi) to disburse payments or distributions to Partners and to third parties to pay the expenses of the Partnership and as otherwise provided for in this Agreement;

(vii) to commence or defend litigation that pertains to the Partnership or any Partnership assets;

(viii) to cause the Partnership, if and to the extent the General Partner deems such insurance advisable, to purchase or bear the cost of any insurance covering the potential liabilities of the Partnership, the General Partner and their partners, officers, employees and agents;

(ix) in the normal course of the Partnership's business and for any Partnership purpose, including without limitation payment of the Partnership's

operating expenses, to cause the Partnership to borrow money and make, issue, accept, endorse and execute promissory notes, drafts, bills of exchange, guarantees and other instruments and evidences of indebtedness, and secure the payment thereof by mortgage, pledge or assignment of or security interest in all or any part of the securities and other property then owned or thereafter acquired by the Partnership; and

(x) subject to the other terms and provisions of this Agreement, to execute, deliver and perform such contracts, agreements and other undertakings, and to engage in all activities and transactions, as it may deem necessary or advisable for, or as may be incidental to, the conduct of the business contemplated by this Section 4.1, including, without in any manner limiting the generality of the foregoing, contracts, agreements, undertakings and transactions with any Partner or with any other person, firm or corporation having any business, financial or other relationship with any Partner or Partners.

(c) The General Partner shall be the tax matters partner for purposes of Section 6231(a)(7) of the Code. Each Partner agrees not to treat, on its personal U.S. federal income tax return or in any claim for a refund, any item of income, gain, loss, deduction or credit in a manner inconsistent with the treatment of such item by the Partnership. The General Partner shall have the exclusive authority and discretion to make any elections required or permitted to be made by the Partnership under any provisions of the Code or any other revenue laws.

4.2 Investment Management.

(a) The General Partner shall have complete and exclusive responsibility for all investment and investment management decisions to be undertaken on behalf of the Partnership and shall have the power and authority to do all things necessary or proper to carry out its duties hereunder.

(b) Without limiting the generality of the General Partner's duties and obligations hereunder, the General Partner shall have full power and authority, at the expense of the Partnership:

(i) to purchase, sell, exchange, lend, trade and otherwise deal in and with investments and other property of the Partnership;

(ii) to make all decisions relating to the manner, method and timing of investment and trading transactions, to select brokers for the execution, clearance and settlement of any transactions (including, subject to applicable federal securities laws, principal and agency cross transactions with one or

more brokers) on such terms as the General Partner considers appropriate, and to grant limited discretionary authorization to such persons with respect to price, time and other terms of investment and trading transactions;

(iii) to make all decisions relating to the investment of Partnership assets in other investment vehicles (including entities managed or advised by an affiliate of the General Partner) on such terms as the General Partner considers appropriate;

(iv) to cause investments owned by the Partnership to be registered in the Partnership's name, in the name of a nominee or other fiduciary, or to be held in street name in a Partnership account, as the General Partner, in its sole discretion, shall determine;

(v) to trade on margin, to borrow from banks or other financial institutions, and to pledge Partnership assets as collateral therefor;

(vi) to enter into repurchase agreements, reverse repurchase agreements, short sales, or other such arrangements with respect to Partnership assets;

(vii) to open and maintain bank accounts and brokerage accounts on behalf of the Partnership and to pay the customary fees and charges applicable to transactions in all such accounts;

(viii) to arrange for the custody of portfolio securities and other assets acquired or held on behalf of the Partnership, to direct custodians to deliver funds or Investments for the purpose of effecting transactions, and to instruct custodians to exercise or abstain from exercising any right or privilege attaching to assets; and

(ix) to engage (directly or indirectly through investments in pooled investment vehicles) investment managers and other financial advisors and consultants as the General Partner may deem necessary or advisable in connection with the investment activities of the Partnership and to compensate such persons for their services from the assets and/or profits of the Partnership.

(c) In the course of selecting brokers for execution, clearance and settlement of transactions for the Partnership, the General Partner may agree to such commissions, fees and other charges on behalf of the Partnership as it shall deem reasonable in the circumstances, taking into account all such factors as it deems relevant and proper under the circumstances, including the value of any products or services (as described by the General Partner in written disclosures to Limited Partners from time to time, as the same may be

modified from time to time) provided by the broker or paid for by the broker (either by direct or reimbursement payments or by commissions, or by mark-ups or credits, or by any other means), whether within or without the safe-harbor of Section 28(e) under the Securities Exchange Act of 1934; it being understood that, none of such products or services need to be for the benefit or exclusive benefit of the Partnership, the cost of the services of the broker (*e.g.*, commissions) related to such products or services need not represent the lowest cost available, the Broker shall be under no obligation to combine or arrange orders so as to obtain reduced charges, and that all of the foregoing is subject to any more limiting or expansive written disclosures given to Limited Partners by the General Partner from time to time, as the same may be modified from time to time.

4.3 Delegation of Duties

(a) The General Partner may delegate to any person or persons any of the duties, powers and authority vested in it hereunder on such terms and conditions as it may consider appropriate.

4.4 Rights of Limited Partners.

Except as otherwise provided in this Agreement, the Limited Partners shall take no part in the management or control of the Partnership's business. Limited Partners shall have no right or authority to act for the Partnership or to vote on matters other than the matters set forth in this Agreement or as required by applicable law. Except as otherwise provided by law, the liability of each Limited Partner is limited to the amount of his capital contributions (plus any accretions in value thereto prior to withdrawal).

4.5 Other Activities of Partners.

(a) The General Partner shall not be required to devote full time to the affairs of the Partnership, but shall devote such time as may be reasonably required therefor.

(b) Each Partner agrees that any other Partner (and any partner, director, officer, shareholder, affiliate or employee of any Partner) may engage in or possess an interest in other business ventures or commercial dealings of every kind and description, independently or with others, including, but not limited to, management of other accounts, investment in, or financing, acquisition and disposition of, securities, investment and management counseling, brokerage services, serving as director, officer, adviser or agent of any other company, partner of any partnership, or trustee of any trust, or entering into any other commercial arrangements, whether or not any such activities may conflict with any interest of the parties with respect to the Partnership. The Partners expressly agree that neither the General Partner nor the Limited Partners shall have any rights in or to such activities, or any profits derived therefrom, as a result of this Agreement. Without in any way limiting the foregoing, each Partner hereby acknowledges that: (i) neither the General Partner, any Limited Partners, nor their respective partners, directors, officers, shareholders, affiliates or employees shall have

any obligation or responsibility to disclose or refer any of the investment or other opportunities obtained through activities contemplated by this Section 4.5(b) to the General Partner or the Limited Partners, but may refer the same to any other party or keep such opportunities for their own benefit; and (ii) the General Partner, the Limited Partners and their respective partners, directors, officers, shareholders, affiliates and employees are hereby authorized to engage in activities contemplated by this Section 4.5(b) with, or to purchase, sell or otherwise deal or invest in securities issued by, companies in which the Partnership might from time to time invest or be able to invest or otherwise have any interest in, without the consent or approval of the Partnership or any other Partner.

(c) The parties hereto hereby waive, and covenant not to sue on the basis of, any law (statutory, common law or otherwise) respecting the rights and obligations of the Partners *inter se* which is or may be inconsistent with this Section 4.5.

4.6 Duty of Care; Indemnification.

(a) Neither the General Partner nor its officers, directors, employees, shareholders, or affiliates shall be liable, responsible or accountable in damages or otherwise to the Partnership or any of its Partners, successors, assignees or transferees for any loss or damage occasioned by any acts or omissions in the performance of its services under this Agreement, unless such loss or damage is due to the gross negligence, fraud, recklessness or willful misconduct of the General Partner or its respective officers, directors, employees, shareholders, or affiliates. Moreover, neither the General Partner, nor its officers, directors, employees, shareholders, or affiliates, shall have any liability to the Partnership or any of its Partners, successors, assignees or transferees for any losses or damages suffered due to the action or inaction of any agent retained by the Partnership, whether through negligence, dishonesty or otherwise, provided that the agent was selected by the General Partner without gross negligence, fraud, recklessness or willful misconduct or as otherwise required by law. The General Partner may consult with counsel and accountants in respect of the Partnership's affairs and be fully protected and justified in any action or inaction which is taken in accordance with the advice or opinion of such persons, provided that they were selected with reasonable care.

(b) The General Partner (which shall include for this purpose each director, officer, employee or agent of, or any person who controls, the General Partner, and their executors, heirs, assigns, successors or other legal representatives) shall be indemnified to the full extent permitted by law by the Partnership (but not the Partners individually) against any cost, expense (including attorneys' fees), judgment or liability reasonably incurred by or imposed upon it in connection with any action, suit or proceeding (including any proceeding before any administrative or legislative body or agency) to which it may be made a party or otherwise be involved or with which it shall be threatened by reason of being or having been the General Partner; provided, however, that the General Partner shall not be so indemnified to the extent such cost, expense, judgment or liability shall have been finally determined in a decision on the merits in any such action, suit or proceeding to have been incurred or suffered by the General Partner by reason of willful misfeasance, bad faith,

gross negligence, or reckless disregard of the duties involved in the conduct of the General Partner's office. The right to indemnification granted by this Section 4.6 shall be in addition to any rights to which the General Partner may otherwise be entitled and shall inure to the benefit of the successors or assigns of such General Partner. The Partnership shall pay the expenses incurred by the General Partner in defending a civil or criminal action, suit or proceeding in advance of the final disposition of such action, suit or proceeding, upon receipt of an undertaking by the General Partner to repay such payment if there shall be an adjudication or determination that it is not entitled to indemnification as provided herein. The General Partner may not satisfy any right of indemnity or reimbursement granted in this Section 4.6 or to which it may be otherwise entitled except out of the assets of the Partnership, and no Partner shall be personally liable with respect to any such claim for indemnity or reimbursement. The General Partner may obtain appropriate insurance on behalf of the Partnership to secure the Partnership's obligations hereunder.

(c) All rights to indemnification permitted in this Agreement and payment of associated expenses shall not be affected by the termination and dissolution of the Partnership or the removal, withdrawal, insolvency, bankruptcy, termination, or dissolution of the General Partner or Limited Partners.

ARTICLE V.

ADMISSIONS, TRANSFERS AND WITHDRAWALS

5.1 Admission of Limited Partners.

The General Partner may admit additional Limited Partners at any time, in which event the required capital contribution of any such additional Limited Partner shall be determined by the General Partner, subject to Section 3.1(b).

5.2 Admission of Additional General Partner.

The General Partner may admit one or more additional general partners, who may be natural persons, partnerships or companies, to the Partnership only if such action is approved by the affirmative vote of all Limited Partners.

5.3 Transfer of Interests of Limited Partners.

No transfer or assignment of, or pledge of or grant of a security interest in, any Limited Partner's interest in the Partnership, whether voluntary or involuntary, shall be valid or effective, and no transferee shall become a substituted Limited Partner, unless the prior written consent of the General Partner has been obtained, which consent may be granted or refused in its sole discretion. Until approved by the General Partner, any successor to the interest of a Limited Partner shall be entitled to the allocations and distributions attributable to such interest and to withdraw such interest as provided in Section 5.5 but shall not have any of the other rights of a Limited Partner.

5.4 Transfer of Interest of General Partner.

The General Partner may not transfer its interest as General Partner in the Partnership other than with the approval of all of the Limited Partners.

5.5 Withdrawal of Interests of Partners.

(a) The interest of a Partner in the Partnership may not be withdrawn from the Partnership prior to its dissolution except (i) in whole or in part effective as of the end of any Fiscal Year upon at least ninety (90) days written notice to the General Partner or (ii) with the prior written consent of the General Partner.

(b) The General Partner may at any time require any Partner to withdraw from the Partnership in whole or in part.

(c) A withdrawing Partner shall be entitled to receive the balance of such Partner's Capital Account as of the date of withdrawal, which shall be paid to the withdrawing Partner, at the election of the General Partner, either (i) without interest within ninety (90) days after the effective date of withdrawal, or (ii) with interest at the London Interbank Offered Rate for thirty (30) day deposits of $1,000,000 as quoted in The Wall Street Journal from the effective date of the withdrawal until paid, in equal annual installments over a period of not more than three (3) years from the date of withdrawal. A withdrawn Partner shall not share in the income, gains and losses of the Partnership or have any other rights as a Partner after the effective date of the withdrawal except as provided in this Section 5.5(c).

ARTICLE VI.

LIQUIDATION

6.1 Liquidation of Partnership Assets.

(a) Upon dissolution of the Partnership, the General Partner shall promptly liquidate the business and administrative affairs of the Partnership, except that if the General Partner is unable to perform this function, a liquidator elected by Limited Partners whose Partnership Percentages represent more than fifty percent (50%) of the aggregate Partnership Percentages of all Limited Partners shall liquidate the business and administrative affairs of the Partnership. Net Profit and Net Loss during the Fiscal Periods which include the period of liquidation shall be allocated pursuant to Article III. The proceeds from liquidation shall be divided in the following manner:

(i) the debts, liabilities and obligations of the Partnership, other than debts to Partners, and the expenses of liquidation (including legal and accounting expenses incurred in connection therewith), up to and including the

date that distribution of the Partnership's assets to the Partners has been completed, shall first be paid;

(ii) such debts as are owing to the Partners shall next be paid; and

(iii) the Partners shall next be paid amounts pro rata in accordance with, and up to the positive balances of their respective Capital Accounts, as adjusted pursuant to Article III to reflect allocations for the Fiscal Period ending on the date of the distributions under this Section 6.1(a)(iii).

(b) Anything in this Section 6.1 to the contrary notwithstanding, the General Partner or liquidator may distribute ratably in-kind rather than in cash, upon dissolution, any assets of the Partnership; provided, however, that if any in-kind distribution is to be made, (i) the assets distributed in kind shall be valued by the General Partner in good faith as of the actual date of their distribution, and charged as so valued and distributed against amounts to be paid under Section 6.1(a) above, and (ii) any gain or loss (as computed for book purposes) attributable to property distributed in-kind shall be included in the Net Profit or Net Loss for the Fiscal Period ending on the date of such distribution.

ARTICLE VII.

ACCOUNTING AND VALUATIONS; BOOKS AND RECORDS

7.1 Accounting and Reports.

(a) The Partnership may adopt for tax accounting purposes any accounting method which the General Partner shall decide in its sole discretion is in the best interests of the Partnership and which is permissible for U.S. federal income tax purposes.

(b) As soon as practicable after the end of each taxable year, the General Partner shall furnish to each Limited Partner such information as may be required to enable each Limited Partner properly to report for federal and state income tax purposes his distributive share of each Partnership item of income, gain, loss, deduction or credit for such year.

7.2 Determinations by General Partner.

(a) All matters concerning the determination and allocation among the Partners of the amounts to be determined and allocated pursuant to Section 3.4 hereof, and the items of income, gain, deduction, loss and credit to be determined and allocated pursuant to Section 3.5 hereof, including any taxes thereon and accounting procedures applicable thereto, shall be determined by the General Partner unless specifically and expressly otherwise

provided for by the provisions of this Agreement, and such determinations and allocations shall be final and binding on all the Partners.

(b) The General Partner may make such adjustments to the computation of Net Profit or Net Loss, or any component items comprising either of the foregoing, as it considers appropriate to reflect fairly and accurately the financial results of the Partnership and the intended allocation thereof among the Partners.

7.3 Books and Records.

The General Partner shall keep books and records pertaining to the Partnership's affairs showing all of its assets and liabilities, receipts and disbursements, realized income, gains and losses, Partners' Capital Accounts and all transactions entered into by the Partnership. Such books and records of the Partnership shall be kept at its principal office, and all Partners and their representatives shall at all reasonable times have free access thereto for the purpose of inspecting or copying the same.

ARTICLE VIII.

GENERAL PROVISIONS

8.1 Amendment of Partnership Agreement.

(a) This Agreement may be amended, in whole or in part, only with the written consent of (i) the General Partner and (ii) all of the Limited Partners.

8.2 Notices.

Notices which may or are required to be given under this Agreement by any party to another shall be given by hand delivery or by registered or certified mail, return receipt requested, and shall be addressed to the respective parties hereto at their addresses as set forth on Exhibit A hereto or to such other addresses as may be designated by any party hereto by notice addressed to the General Partner in the case of notice given by any Limited Partner, and to each of the Limited Partners in the case of notice given by the General Partner. Notices shall be deemed to have been given when delivered by hand or on the date indicated as the date of receipt on the return receipt.

8.3 Agreement Binding Upon Successors and Assigns.

This Agreement shall be binding upon and inure to the benefit of the parties hereto and their respective successors, but the rights and obligations of the General Partner hereunder shall not be assignable, transferable or delegable except as provided in Sections 5.2 and 5.4, and any attempted assignment, transfer or delegation thereof which is not made pursuant to the terms of Section 5.2 or Section 5.4 shall be void.

service of process in any action arising out of this Agreement by the mailing thereof by registered or certified mail, return receipt requested, to such Partner's address set forth in the Schedule of Partners. In any action to enforce any provision of this Agreement, the prevailing party shall be entitled to recover all expenses, including reasonable attorneys fees, incurred in connection therewith.

8.5 Not for Benefit of Creditors.

The provisions of this Agreement are intended only for the regulation of relations among Partners and between Partners and former or prospective Partners and the Partnership. This Agreement is not intended for the benefit of non-Partner creditors and no rights are granted to non-Partner creditors under this Agreement.

8.6 Consents.

Any and all consents, agreements or approvals provided for or permitted by this Agreement shall be in writing and a signed copy thereof shall be filed and kept with the books of the Partnership.

8.7 Miscellaneous.

(a) The captions and titles preceding the text of each Section hereof shall be disregarded in the construction of this Agreement.

(b) This Agreement may be executed in counterparts, each of which shall be deemed to be an original hereof.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement as of the day and year first above written.

GENERAL PARTNER:

RENAISSANCE TECHNOLOGIES LLC.

By: _____
MARK SILBER
VICE PRESIDENT

LIMITED PARTNERS:

MEDALLION FUND L.P.
By: Renaissance Technologies LLC.
its General Partner

By: _____
Mark Silber, Vice President

MEDALLION ASSOCIATES L.P.
By: Renaissance Technologies LLC.
its General Partner

By: _____
Mark Silber, Vice President

MEDALLION USA L.P.
By: Renaissance Technologies LLC.
its General Partner

By: _____
Mark Silber, Vice President

MEDALLION RMP FUND L.P.
By: Renaissance Technologies LLC.
its General Partner

By: _____
Mark Silber, Vice President

MEDALLION INTERNATIONAL LTD.

By: _____
Mark Silber, Director

MEDALLION CAPITAL INVESTMENTS, LTD.

By: _____
Mark Silber, Director

EXHIBIT A

Addresses of Partners for Notices

Partner	Address
Medallion Fund L.P.	c/o Renaissance Technologies LLC. 800 Third Avenue New York, New York 10022
Medallion Associates L.P.	c/o Renaissance Technologies LLC. 800 Third Avenue New York, New York 10022
Medallion USA L.P.	c/o Renaissance Technologies LLC. 800 Third Avenue New York, New York 10022
Medallion RMP Fund L.P.	c/o Renaissance Technologies LLC. 800 Third Avenue New York, New York 10022
Medallion International Ltd.	c/o MQ Services Ltd. Chancery Hall, 52 Reid Street Hamilton HM12, Bermuda
Medallion Capital Investments Ltd.	c/o MQ Services Ltd. Chancery Hall, 52 Reid Street Hamilton HM12, Bermuda

Execution Copy

AMENDED & RESTATED INVESTMENT ADVISORY AGREEMENT

AGREEMENT dated as of **November 16, 2007** (the "Agreement") between **Deutsche Bank AG London** (the "Client"), and **Renaissance Technologies LLC (f/k/a Renaissance Technologies Corp.)** (the "Advisor").

In consideration of the premises and mutual promises hereinafter set forth, the parties hereto agree as follows:

1. Appointment of the Advisor.

(a) Client hereby appoints the Advisor as the exclusive manager of a separately managed account containing a designated portion of the Client's proprietary portfolio (the "*Account*") upon the terms hereinafter contained and in accordance with Client's investment guidelines and restrictions until its appointment shall be terminated as hereinafter provided, and the Advisor hereby accepts such appointment and agrees to assume the obligations and duties set forth herein. Client's Investment Guidelines and Restrictions are as set forth on Appendix I hereto, as may be subsequently amended from time to time by written agreement between Client and the Advisor (the "Investment Guidelines"). The Account may be divided into one or more sub-accounts (each, a "Sub-Account") and Appendix I hereto shall provide for the percentage allocation applicable to each such Sub-Account (allowing for fractional investments), *provided that* any new Sub-Account shall only be included in the Account at the request of the Client. Each Sub-Account may be further sub-divided into (i) one or more "Trading Accounts" where the rate of interest on borrowed funds shall be set daily (the "Floating Rate") and (ii) one or more "Term Accounts" where the rate of interest on borrowed funds shall be a non-Floating Rate. Upon the establishment or liquidation of any Sub-Account, Client shall amend Appendix I so as to: (i) include, if appropriate, specific Investment Guidelines with respect to the Sub-Accounts then included in the Account; and (ii) re-allocate the percentages applicable to all Sub-Accounts in the Account at that time. Furthermore, the Advisor shall, at its discretion, allocate the investments within each Sub-Account to Trading Accounts and Term Accounts (allowing for fractional investments), provided that such allocation of investments to Trading Accounts and Term Accounts will be effected in the same manner in respect of all then outstanding Sub-Accounts.

(b) The fees and compensation of the Advisor for the performance of its duties under this Agreement ("*Advisor Fees*") are as set forth in the Fee Letter entered into between Advisor and Client attached hereto as Appendix II. The terms and provisions of such Fee Letter are incorporated herein by reference.

(c) Until the termination of this Agreement, the Client shall ensure, whether by obtaining credit or making cash deposits to the Account, that the assets and credit available in the Account shall at all times be sufficient to permit the Advisor to trade on behalf of the Client up to the limits contemplated by the Investment Guidelines.

(d) Nothing in this Agreement shall be deemed or construed to convey to Advisor an ownership interest in the Account.

2. Functions, Powers, Duties and Obligations of the Advisor.

During the continuance of its appointment the Advisor shall, subject to compliance with the Investment Guidelines, have full power, authority and right to:

a) supervise and direct the investment and reinvestment of all assets in the Account, and engage in such transactions on behalf of the Client's Account as appropriate, in Advisor's discretion and without prior consultation with the Client, subject only to the terms of this Agreement, in any and all forms of securities or other property, including, without limitation,

derivatives, options, futures and commodities, as permitted by the Investment Guidelines; provided, however, that at any time the Client may reject the purchase or sale of certain securities directed for investment to the Account by the Advisor prior to the actual execution thereof, but all transactions so directed to the Account by the Advisor (whether or not actually executed) shall be referred to as "Designated Positions". For purposes of determining the performance of the Account, any Sub-Account or any Designated Positions, the prices of transactions in securities not actually executed will be within market parameters, if applicable, based on the time such transaction would have been executed had they not been rejected by the Client.

b) hold temporary cash balances in the Account or invest such temporary cash balances in money market funds or comparable short-term investments as specifically directed by the Client, with interest thereon credited to the Account;

c) prepare or procure the preparation of reports on the Account's investment performance and such other matters, as further provided herein;

d) select and place orders with brokers and dealers to execute Account transactions, as further provided herein; and

e) provide such other services in connection with the management of the Account by mutual consent of the Client and the Advisor.

The Advisor shall keep or cause to be kept on behalf of the Client's Account such books, records, statements and accounts as may be necessary to evidence a complete record of all transactions carried out by the Advisor for the Account; and shall permit the Client and its employees and agents to inspect such books, records and statements at all reasonable times.

In exercising rights and carrying out its duties hereunder the Advisor is authorized to act for the Account and on the Client's behalf either itself or in part through its authorized agents as it shall determine; *provided, however*, that the appointment of any agent shall not relieve the Advisor of its responsibilities or liabilities hereunder.

The Advisor is authorized but shall not be required, to tender or convert any securities in the Account; to execute instruments with regard to such securities; to endorse, transfer or deliver such securities. Unless directed by Client, the Advisor shall not execute waivers or consents with regard to any securities in the Account or exercise rights or consent to any class action, plan of reorganization, merger, combination, consolidation, liquidation or similar plan with reference to such securities.

The authorities herein contained are continuing ones and shall remain in full force and effect until revoked by termination of this Agreement as hereinafter provided, but such revocation shall not affect any liability in any way resulting from transactions initiated prior to such revocation.

3. Trade Process Procedures.

a) Daily Trade Blotter File. No later than at the close of business (i.e., 5:00 p.m. New York Time) on each "Exchange Business Day" (as defined in the 1996 ISDA Equity Derivatives Definitions and with respect to the primary Exchange(s) on which the equity securities or Underlying Securities (as defined in the Investment Guidelines) in the Account trade), the Advisor shall deliver via facsimile or electronic transmission to the relevant Client Contact a Trade Blotter File setting forth for each transaction effected by the Advisor for the Account on such Exchange Business Day the following:

(i) the Ticker (or other security identifier);

(ii) the quantity and transaction price (gross basis);

(iii) commission or any other transaction fee, if available;

(iv) the name of the third party executing broker (if any); and

(v) transaction type (buy, sell, short, cover, etc.).

The Trade Blotter File shall be delivered to the Client in mutually agreed format/medium.

b) Short Sales. Prior to effecting any short sales in any security for the Account, the Advisor shall obtain from the authorized designee of the Client short sale borrowing capability, it being understood and agreed that securities borrowing transactions to cover short sales shall be the responsibility of the Client. Advisor shall effect all short sales and all other securities sales for the Client's Account in full compliance with all applicable short sale rules under Federal securities law and regulations and the rules of the relevant securities exchange.

c) Third Party Brokers. The Advisor shall execute trades in or for the Account only with those brokers identified on Appendix III hereto. Appendix III may, from time to time, be amended by mutual agreement of the parties hereto, such agreement not to be unreasonably withheld. Notwithstanding any provision regarding the Advisor's authority hereunder to act on behalf of the Client, any documentation required in connection with establishing such brokerage account shall be reviewed and approved by the Client prior to execution, such approval not be unreasonably withheld.

d) Equity Position Limitations. The Advisor specifically agrees and acknowledges that (i) U.S. and foreign securities and banking laws applicable to Client may limit from time to time the trading decisions of Advisor in respect of the Account; (ii) specifically (by way of example) pursuant to applicable U.S. banking laws and regulations the Client is subject to general limitations on holding a class of the outstanding voting equity securities or any class of equity securities voting and non-voting of any U.S. company; and (iii) under relevant U.S. and foreign banking and securities laws, generally any equity position of a particular issuer held in the Account will be aggregated with equity positions of such issuer held in other proprietary account(s) of the Client for purposes of determining compliance with such banking laws.

e) Regulatory Compliance. The Advisor specifically agrees and acknowledges that it may, from time to time, be necessary or advisable, in order to maintain compliance with U.S. or non-U.S. applicable law or maintain compliance with this Agreement, to liquidate certain positions in the Account, or take other remedial actions. The Advisor agrees to comply promptly with any Client directions in this regard, subject to Section 8(c) below.

4. Services of the Advisor Not Exclusive.

The services of the Advisor to the Client hereunder are not to be deemed exclusive and the Advisor shall be free to render similar services to others and to retain for its own use and benefit all fees or other moneys payable thereby and the Advisor shall not be deemed to be affected with notice of or to be under any duty to disclose to the Client any fact or thing which comes to the notice of the Advisor or any employee or agent of the Advisor in the course of the Advisor rendering similar services to others or in the course of its business in any other capacity or in any manner whatsoever otherwise than in the course of carrying out its duties hereunder. Nothing in this Agreement shall limit or restrict the right of any directors, officers or employees of the Advisor to engage in any other business or to devote his time and attention in part to the management or other aspects of any other business, whether of a similar or dissimilar nature. The Advisor may aggregate purchases or sales of securities for the Account with purchases or sales of the same securities by other clients of the Advisor, *provided* that Advisor first discloses to, and obtains approval of, Client regarding Advisor's allocation procedures. The Advisor agrees that in the event that purchases or sales of securities for the Account shall coincide with purchases or

sales of the same securities by other clients of the Advisor, the Advisor will make such allocation in a manner believed by the Advisor to be equitable to each client.

Instructions to execute securities transactions may be placed by the Advisor with brokers, dealers and banks who supply research to the Advisor and such research may be used by the Advisor in advising other clients of the Advisor.

5. Indemnification.

Each party hereto (as applicable, the "Indemnifying Party") agrees to indemnify, defend and hold harmless the other party (the "Indemnified Party") and its officers, directors, shareholders, employees, affiliates and agents from and against all demands, claims, liabilities, damages, expenses (including legal fees and disbursements) and losses (collectively, "Claims") resulting directly from any misconduct or failure to act by the Indemnifying Party that results in any material breach by the Indemnifying Party of any of the representations, warranties or agreements of the Indemnifying Party contained in this Agreement and the Appendices annexed hereto.

6. Agency Cross Transactions.

The Advisor shall be permitted to effect transactions between the Client's Account and any other account for which the Advisor acts as investment advisor. In connection with such transactions, the Advisor may act as broker for, receive commissions from, and have a potentially conflicting division of loyalties and responsibilities regarding, both parties to such transactions. The foregoing permission may be revoked at any time by written notice from the Client to the Advisor.

7. Assignment.

This Agreement may not be assigned without the prior written consent of the non-assigning party and any purported assignment without such consent shall be void and of no effect. Neither party shall unreasonably withhold consent to any proposed assignment of this Agreement by the other party to any of its affiliates. In the event that a party wishes to assign this Agreement that party must provide to the non-assigning party such documents as the non-assigning party may reasonably request in connection with the assignment and shall allow a reasonable time during which the non-assigning party may review any such documents.

8. Termination.

a) The management services provided for herein shall continue in full force and effect until terminated by one of the parties hereto as provided below.

b) This Agreement may be terminated by either party upon **sixty (60)** Exchange Business Days' notice to the other party, subject to the remaining provisions of this Section 8.

c) In the event the Client notifies Advisor in writing either that (i) the securities and other investments in the Account, Advisor's management activities, or any Account transaction is reasonably determined by the Client, in good faith, to be in violation of the Investment Guidelines (an *"Investment Guideline Violation"*), or (ii) the Client has reasonably determined in good faith that it is necessary or advisable to liquidate certain positions in the Account, or take other remedial actions, in order to maintain compliance with applicable law or to maintain compliance with this Agreement (a *"Compliance Violation"*), the Advisor shall (in the event of an Investment Guideline Violation) cause the conditions constituting such Investment Guideline Violation to cease to exist, and (in the event of a Compliance Violation) effect either the liquidation of the positions to which the Compliance Violation relates, or take such other remedial action as the Client may direct. In connection with any such Compliance Violation or Investment Guideline Violation, Advisor shall take such remedial steps within such time periods as Client shall direct in

its written "Violation" notice to Advisor; and Client agrees that it shall act in a commercially reasonable manner, consistent with the specific circumstances, in setting any such remedial action and remedial time periods in connection with any such Violations.

If the conditions constituting such Investment Guideline Violation or Compliance Violation continue to exist after the time set for remedial action by Advisor has expired, the Client shall be entitled upon written notice to the Advisor to immediately assume management of the affected Sub-Account, whereupon that portion of this Agreement relating to such affected Sub-Account shall be terminated.

d) Upon the occurrence of an *"Early Termination Event"* (as defined in any confirmation for an option transaction referencing a Sub-Account), the Client shall be entitled to immediately assume management of the affected Sub-Account, whereupon this Agreement shall be of no force or effect with regard to the affected Sub-Account, but shall remain in full force and effect with regard to the remaining Sub-Account(s) in the Account, unless the affected Sub-Account is the only Sub-Account remaining in the Account, in which case the Client shall be entitled to immediately assume management of the Account and this Agreement shall be immediately terminated. In connection therewith, Client shall commence an orderly liquidation and reduction to USD cash of the assets in the affected Sub-Account(s) (a "Liquidation") over a four consecutive Exchange Business Day period, commencing on the Early Termination Date (as defined in any confirmation for an option transaction referencing a Sub-Account) or promptly thereafter. Any Liquidation shall be effected in an "equal dollar weighted" manner in approximately equal proportions (i.e., approximately 25% of the affected Sub-Account per Exchange Business Day) over such period, with the Client giving due regard to effecting proportionate reductions of any economic long positions and economic short positions, unless the Client and the Advisor agree on another commercially reasonable manner. In the event of timely receipt by the Client from the option buyer of a *"Buyer Termination Notice"* (as defined in any confirmation for an option transaction referencing a Sub-Account), the transfer of assets described in any such notice shall occur on the Early Termination Date.

e) For the purpose of this Section 8 if notice is being delivered with respect to a Compliance Violation or Investment Guideline Violation, such notice shall be delivered to the relevant person(s) specified in the Notices information below and shall specify the investment positions and/or other circumstances with respect to which the Compliance Violation or Investment Guidelines Violation relates, and in all events, notice shall be deemed to be received on the Exchange Business Day that it is received by the Advisor if such notice has been received by 10:00 A.M. on such Exchange Business Day. If notice is received after 10:00 A.M. on an Exchange Business Day it shall be deemed to have been received on the following Exchange Business Day.

f) Upon the occurrence of an option exercise by the option buyer under an option transaction or other termination of an option transaction (other than by reason of an Early Termination Event as referenced in Section 8(d) above), this Agreement, inasmuch as it relates to a Sub-Account to which such option relates shall be of no force or effect on the *Cash Settlement Payment Date* (as defined in the confirmation for an option transaction referencing such Sub-Account) following the occurrence of such option exercise. However, this Agreement shall continue to be of full force and effect with regard to the remainder of the Sub-Account(s) not affected by the option exercise or other termination of that option transaction, unless such event results in the liquidation of the entire Account, in which case, after such liquidation of the entire Account by the Advisor, the Client shall be entitled to immediately assume management of the Account and this Agreement shall be immediately terminated. In connection with any such option transaction exercise (or other option termination), Advisor shall commence a Liquidation of the affected Sub-Account over a four consecutive Exchange Business Day period, commencing on the Exercise Date (as defined in the confirmation for the option transaction relating to such Sub-Account) or promptly thereafter. Any Liquidation shall be effected in an "equal dollar weighted" manner in approximately equal proportions (i.e., approximately 25% of the affected Sub-Account

per Exchange Business Day) over such period, unless the Client and the Advisor agree on another commercially reasonable manner. In conducting the Liquidation, the Advisor shall give due regard to effecting proportionate reductions of any economic long positions and economic short positions.

g) Unless previously terminated pursuant to the provisions of this Section 8, this Agreement shall terminate on May 10, 2010.

h) In connection with any partial liquidation of the Account, the Client shall, in good faith and in a commercially reasonable manner, make the appropriate changes in the Investment Guidelines to accurately reflect such partial liquidation of the Account. In addition, the Advisor shall, consistent with the annexed Investment Guidelines, thereafter strictly limit its trading activities for the affected Sub-Account to risk reducing trades in a manner that preserves or increases the dollar neutrality, with the overall objective of preserving, at a minimum, the then current mark-to-market value of the affected Sub-Account. Such "risk reducing" trading strategy shall remain in effect with respect to such Sub-Account for the remaining term of this Agreement, unless and until Client, by subsequent written notice to the Advisor, instructs Advisor to recommence "normal" trading activities under this Agreement.

i) Upon termination of this Agreement the Client shall resume control of the Account, without further liability or responsibility of the Advisor therefor.

9. Confidentiality.

(a) Subject to the provisions of Section 9(b) below, neither of the parties hereto shall, except under compulsion of any applicable law or regulation made thereunder or as required by the regulatory authorities of any jurisdiction in which transactions on behalf of the Account are effected or regulated (hereafter "Regulatory Mandated Disclosure"), either before or after the termination of this Agreement disclose to any person not authorized by the relevant party to receive the same any confidential information relating to such party or to the affairs of such party of which the party disclosing the same shall have become possessed during the period of this Agreement and such party shall use all reasonable efforts to prevent any such disclosure as aforesaid. Without in any way limiting the generality of the foregoing, before acting upon a request for any Regulatory Mandated Disclosure, a party shall (i) immediately notify the other party of the existence, terms and circumstances surrounding such request; (ii) consult with such other party on the advisability of taking legally available steps to resist or narrow such request; and (iii) if such Regulatory Mandated Disclosure is required, exercise such party's best efforts to obtain reasonable assurance that confidential treatment will be afforded.

The term "confidential information" shall include (without limitation) the existence of, and contents of, the Trade Restrictions List (referenced on Appendix I hereto) delivered by Client to Advisor from time to time. The Advisor acknowledges its obligations under applicable law, including federal and state laws, not to disclose, or otherwise effect trades based on, material non-public information. Without limiting the responsibilities and agreements of the Advisor under this Section 9, the Advisor specifically agrees with Client that it shall not utilize, directly or indirectly, any Trade Restrictions List as basis for trading or otherwise investing in (either through the Account or by means of any other independent trading or advisory activities of the Advisor) any securities included on such Trade Restrictions List.

The Client further specifically agrees that, other than by reason of Regulatory Mandated Disclosure, (i) except with the prior written consent of the Advisor it shall not disclose to any third party the terms of the Advisor-directed trading strategies (including the nature and content of the Account) contemplated under this Agreement (as evidenced by the annexed Investment Guidelines and related transaction reports); and (ii) it shall not establish or engage in any form of trading strategy or strategies, for its own (or any affiliate's) account--or for the account of any third

party--which by virtue of Client's knowledge of Advisor's trading strategies provided for in this Agreement could be deemed to materially replicate any aspect of such Advisor trading strategy.

(b) Notwithstanding anything to the contrary in this Agreement, except as otherwise hereinafter set forth in this Section 9(b), the parties hereto agree and acknowledge that the structure and tax aspects of the Account, any Sub-Account, this Agreement, any transaction effected pursuant to this Agreement and any option referencing the Account or any Sub-Account, and all materials provided by either party with respect to such structure and tax aspects are, and have always been, non-confidential, and are not the proprietary information of either party. Each party and each Affiliate thereof (and each employee, representative, or other agent of any of the foregoing) may disclose, and has always been entitled to disclose, to any and all persons, without limitation of any kind, the tax treatment and tax structure of the Account, any Sub-Account, this Agreement, any transaction effected pursuant to this Agreement and any option referencing the Account or any Sub-Account and all materials of any kind (including opinions or other tax analyses) that are provided to such party (or Affiliate) relating to such tax treatment and tax structure (provided, however, that the names and all other identifying information of all entities and persons have been properly erased from such materials prior to the disclosure thereof). Each party otherwise agrees not to disclose any proprietary, non-public information regarding the other party it may have received in connection with this Agreement, including, without limitation, that such party has entered into this Agreement with the other party, and agrees that it shall not disclose or use the name of the other party (or any Affiliate thereof) for marketing or other purposes not directly relating to the implementation of this Agreement. Notwithstanding the foregoing, either party may disclose any such confidential information if required by law or any judicial, governmental or other regulatory body, provided it gives prior written notice of such required disclosure to the other party. Confidential information of a party shall not include any information in the public domain or information obtained from any third party not under a duty not to disclose it.

10. Miscellaneous.

a) No failure on the part of either party to exercise, and no delay on its part in exercising, any right or remedy under this Agreement will operate as a waiver thereof nor will any single or partial exercise of any right or remedy preclude any other or further exercise thereof or the exercise of any other right or remedy. The rights and remedies provided in this Agreement are cumulative and not exclusive of any rights or remedies provided by law.

b) This Agreement may only be amended by the written agreement of the parties hereto.

c) The illegality, invalidity or unenforceability of any provision of this Agreement under the law of any jurisdiction shall not affect its legality, validity or enforceability under the law of any other jurisdiction nor the legality, validity or enforceability of any other provision.

d) Unless otherwise specified, any notice given hereunder shall be in writing and shall be served by hand (or courier service) at, or by being sent by facsimile or other electronic transmission to the office of the addressee identified herein or in the relevant schedule hereto or such other address as to which either party shall have given written notice to the other party hereto. Any such notice shall be deemed duly served at the time of delivery, as evidenced by a delivery receipt (if delivered by hand or by courier service), or at the time of receipt (if served by facsimile transmission or other transmission). The Advisor may rely and shall be protected in acting upon any written instruction or communication believed by it to be genuine and to have been signed by the proper party or parties.

e) The Advisor will forward to the Client a list of names and specimen signatures of persons authorized to act on behalf of the Account. The Client will forward from time to time a list of names and specimen signatures of persons authorized to act on behalf of the Client. The

Advisor and/or the Client, as applicable, will provide to the other party a revised list of names and specimen signatures of persons authorized to act on behalf of the Account or Client whenever such authorized persons change.

f) Notwithstanding anything to the contrary contained in this Agreement, the Client agrees that any amounts owed or liabilities incurred by the Advisor in respect of any transactions contemplated by this Agreement, will be satisfied solely from the Advisor's assets. Without limiting the generality of the foregoing, in no event shall this Agreement give the Client recourse, whether by setoff or otherwise, with respect to any such amounts owed or liabilities incurred, to or against any assets of any person or entity other than the Advisor.

g) Notwithstanding anything to the contrary contained in this Agreement, absent any material breach of the terms of this Agreement, the Advisor will not be liable to the Client for any losses, damages, costs, expenses, or other liabilities arising in connection with their activities and services hereunder.

h) Notices. All notice information for the relevant party must be sent in accordance with the information set forth below unless otherwise instructed by such party:

Deutsche Bank AG, London Branch
c/o Deutsche Bank Securities Inc.
60 Wall Street
New York, NY 10005
Attn: Satish Ramakrishna/
Tel: (212) 212-250-4990
Fax: (212)212-797-9361

Renaissance Technologies LLC
800 Third Avenue
New York, NY 10022

Attn: Mark Silber / Carla Volpe Porter
Stephen Daffron
Tel: (212) 486-6780
Fax: (212) 758-7136
Email: Mark@rentec.com
Carla@rentec.com
sdaffron@rentec.com

Attn: Peter Brown / Bob Mercer
Tel: (631) 444-7000
Fax: (631) 689-4495
Email: Peter@rentec.com
Mercer@rentec.com

Attn: Thomas Kerns / Scott Chinsky
Tel: (212) 486-6780
Fax: (212) 486-7291
Email: TKerns@rentec.com
Scott@rentec.com

11. Representations and Warranties

Each of the parties (or the specified party, as the case may be) represents, warrants, and agrees with the other party that:

(a) It is duly organized, validly existing and in good standing under the laws of its jurisdiction of incorporation and has all requisite power and authority to own its property, to conduct its business as currently conducted and to execute and deliver, and to perform its obligations under, this Agreement.

(b) This Agreement has been duly authorized, executed and delivered by it and constitutes a legal, valid and binding obligation of such party, enforceable against such party in accordance with its terms.

(c) No permits, licenses, franchises, approvals, authorizations, qualifications or consents of, or registrations or filings with, governmental authorities are required in connection with the execution or delivery by such party of, or the performance by such party of its obligations under, this Agreement, except for such as have been obtained and are in full force and effect.

(d) The execution and delivery of, and the performance by such party of its obligations under, this Agreement do not and will not result in a breach or constitute a violation of, conflict with, or constitute a default under, the certificate of incorporation or bylaws of such party or any agreement or instrument to which it is a party or by which it or any of its property is bound, which breach, violation, conflict or default could have a materially adverse effect on its ability to perform its obligations under this Agreement.

(e) No actions, proceedings or claims are pending or, to the knowledge of such party, threatened against such party or any of its property that could affect the validity or enforceability of this Agreement or that could have a materially adverse effect on the ability of such party to perform its obligations under this Agreement.

(f) Client represents and covenants that it is and will remain for the term of this Agreement a "qualified eligible person" as such term is defined in Rule 4.7 under the Commodity Exchange Act. Client hereby consents to the Account being treated as an "exempt account" pursuant to the provisions of Rule 4.7

12. Amendment and Restatement.

The parties agree that this Agreement amends and restates in its entirety the Investment Advisory Agreement dated as of December 21, 2006, between Client and Advisor (the "Existing Agreement"). The parties hereto acknowledge and agree that this Agreement does not constitute a novation or termination of the Existing Agreement or any transactions thereunder and the Existing Agreement and the transactions thereunder are in all respects continuing (as amended and restated hereby) with only the terms thereof being modified as provided in this Agreement.

13. Governing Law.

THIS AGREEMENT SHALL BE GOVERNED BY AND CONSTRUED IN ACCORDANCE WITH THE LAWS OF THE STATE OF NEW YORK APPLICABLE TO CONTRACTS ENTERED INTO AND TO BE PERFORMED ENTIRELY WITHIN THE STATE.

14. Client Receipt of Advisor's Brochure

The Client hereby acknowledges receipt of the Advisor's current Form ADV Part II or brochure statement in lieu thereof.

PURSUANT TO AN EXEMPTION FROM THE COMMODITY FUTURES TRADING COMMISSION IN CONNECTION WITH ACCOUNTS OF QUALIFIED ELIGIBLE PERSONS, THIS ACCOUNT DOCUMENTATION IS NOT REQUIRED TO BE, AND HAS NOT BEEN, FILED WITH THE COMMISSION. THE COMMODITY FUTURES TRADING COMMISSION DOES NOT PASS UPON THE MERITS OF PARTICIPATING IN A TRADING PROGRAM OR UPON THE ADEQUACY OR ACCURACY OF COMMODITY TRADING ADVISOR DISCLOSURE. CONSEQUENTLY, THE COMMODITY FUTURES TRADING COMMISSION HAS NOT REVIEWED OR APPROVED THIS TRADING PROGRAM OR THIS ACOUNT DOCUMENT.

IN WITNESS WHEREOF, this Agreement has been entered into the day and year first above written.

DEUTSCHE BANK AG LONDON

By: _____
Name: Satish Ramakrishna
Title: Attorney-in-Fact

By: _____
Name:
Title: Attorney-in-Fact

RENAISSANCE TECHNOLOGIES LLC

By: _____
Name: Mark Silber
Title: Vice President

EXHIBIT A

APPENDIX I

Investment Guidelines and Restrictions

A. Account: Investment Guidelines

For purposes of calculations under the Investment Guidelines, all Positions (defined below) shall be valued in USD (converted, if necessary, using the then-applicable relevant FX rate of conversion). The Delta (defined below) of a Position shall be calculated by the Calculation Agent and may be adjusted within reason when such Position has a negative gamma.

1) **Sub-Account Composition:** Any Sub-Account shall be comprised of the following types of securities only: equity securities in a company listed on a recognized exchange, depositary receipts listed on a securities exchange in the United States of America, OTC derivatives, index futures, exchange-traded funds, other equity linked securities (other than OTC derivatives, index futures, and exchange-traded funds), interest rate and currency transactions, or any other financial instruments that may be agreed to between the parties, together with any cash balances from time to time, together with such other securities and assets arising by reason of any Potential Adjustment Events or Merger Events in respect of Positions comprising such Sub-Account from time to time. Derivative Instruments with a negative gamma can only be included in the Sub-Account if entered into with an affiliate of the Client or as otherwise agreed by the parties.

Table 1

	A	B	C	D
Sub Account (M)	9.3951%	90,000,000	18	32,490,000
Sub Account (N)	41.7561%	400,000,000	18	126,400,000
Sub Account (O)	18.7902%	180,000,000	18	43,920,000
Sub Account (P)	5.2195%	50,000,000	18	9,950,000
Sub Account (Q)	15.5530%	243,000,000	18	76,788,000
Sub Account (R)	9.2860%	300,000,000	18	138,000,000

2) Allocations:

Percentage allocations applicable to each Sub Account are set forth in Table 1 Column A.

3) General strategy: Long/Short Statistical Arbitrage

4) Definitions:

a) "Underlying Security" or "U" shall mean any one of the following:

i) an equity security in a company listed on a recognized exchange (e.g., IBM common stock);
ii) an equity index (e.g., the S&P500 index); or
iii) an exchange-traded fund (e.g., the SPDR fund), the value of which is linked to the prices of the equity securities comprising a specified index or basket of equity securities).

b) "Position" means either:

i) a long or short direct holding in an Underlying Security (an "Actual Position"); or
ii) an interest whose value is derived from an Underlying Security, whether by conversion, exchange, exercise or otherwise (a "Derivative Position");

c) "Notional Shares" with respect to any Position means (i) in the case of an Actual Position, the number of shares (long or short) and (ii) in the case of a Derivative Position, the number of shares of the Underlying Security into which the Derivative Position is convertible, exchangeable, exercisable or otherwise related. In all cases, Notional Shares shall be expressed as a positive number.

d) The "Delta" of a Position means the ratio of A over B where:

i) "A" = the actual number of shares in an Underlying Security that would be expected to have the same change in value as the expected change in value of the Position given a small increase in the price of the Underlying Security assuming all other variables remain constant. A will be positive for an increase in value and A will be negative for a decrease in value; and

ii) "B" = the Notional Shares of such Position.

For the avoidance of doubt, the Delta of a long Actual Position is +1, and of a short Actual Position is -1.

e) "Exposure" (Delta-adjusted value) with respect to any Position means the product of (i) Delta, (ii) the Notional Shares and (iii) the share price of the Underlying Security, with the share price of U converted to USD using the prevailing exchange rate if such price is quoted in a currency other than USD.

f) For each U:

i) The "Term Position Set" of U shall consist of all Positions in the Term Basket with the same U.

ii) The "Trading Position Set" of U shall consist of all Positions in the Trading Basket with the same U.

iii) The "Position Set" of U shall consist of the union of the Trading Position Set and the Term Position Set of such U.

iv) "Actual Trading Gross" shall mean the sum of the absolute values of the Exposures of all Actual Positions in the Trading Position Set of U;

v) "Actual Term Gross" shall mean the sum of the absolute values of the Exposures of all Actual Positions in the Term Position Set of U;

vi) "Derivative Trading Gross" shall mean the sum of the absolute values of the Exposures of all Derivative Positions in the Trading Position Set of U;

vii) "Derivative Term Gross" shall mean the sum of the absolute values of the Exposures of all Derivative Positions in the Term Position Set of U;

viii) "Actual Trading Net" shall mean the algebraic sum of the Exposures of all Actual Positions in the Trading Position Set of U;

ix) "Actual Term Net" shall mean the algebraic sum of the Exposures of all Actual Positions in the

Term Position Set of U;

x) "Derivative Trading Net" shall mean the algebraic sum of the Exposures of all Derivative Positions in the Trading Position Set of U;

xi) "Derivative Term Net" shall mean the algebraic sum of the Exposures of all Derivative Positions in the Term Position Set of U; and

xii) "Total Net" shall mean the algebraic sum of Actual Trading Net, Derivative Trading Net, Actual Term Net and Derivative Term Net.

5) Exposure Guidelines

a) ***"Total Gross Trading Exposure"*** shall not exceed the lesser of (i) USD 26,000,000,000 and (ii) the sum of the products obtained by multiplying Table 1 Column C and the corresponding Sub Account Capital Available for each existing Sub Account, as may be adjusted from time to time by mutual consent of the Client and the Advisor,

where ***"Total Gross Trading Exposure"*** shall mean the greatest of:

(i) the sum over all Us of the absolute value of Actual Trading Net;
(ii) the sum over all Us of the Derivative Trading Gross;
(iii) the sum over all Us of the absolute value of the quantity (A+B), where A is the Actual Trading Net, and B is the Derivative Trading Net.

b) ***"Total Gross Term Exposure"*** shall not exceed the lesser of (i) USD 6,000,000,000 and (ii) the sum of the products obtained by multiplying Table 1 Column C and the corresponding Sub Account Capital Available for each existing Sub Account, as may be adjusted from time to time by mutual consent of the Client and the Advisor,

where: ***"Total Gross Term Exposure"*** shall mean the greatest of:
(i) the sum over all Us of the absolute value of Actual Term Net;
(ii) the sum over all Us of the Derivative Term Gross;
(iii) the sum over all Us of the absolute value of the quantity (A+B), where A is the Actual Term Net, and B is the Derivative Term Net;
each of the foregoing determined based on the cost of the Us in all Positions in the Term Baskets, not the market value.

c) ***"Capital Needed"*** shall always be less than or equal to the Capital Available,

where: ***"Capital Available"*** shall mean the sum of the Sub Account Capital Available for all existing Sub-Accounts, where the "Sub Account Capital Available" for each Sub-Account shall be the sum of
(i) The amount set forth in Table 1 Column B (defined as the **Sub Account *Initial Capital Available***);
(ii) the aggregate realized and unrealized gains on all Positions in the Sub-Account minus the aggregate realized and unrealized losses in respect of all Positions in such Sub-Account; and
(iii) the sum in such Sub-Account, expressed in USD, of (A) dividend income (determined based on ex-dividend dates) net of any tax withheld, if necessary, plus (B) interest income and any short rebates (on an accrual basis), plus (C) any other income accrued or realized in the Account, minus (D) payments in lieu of dividends (determined based on ex-dividend dates) grossed up for any dividend withholding taxes, if necessary, minus (E) interest expense and finance charges,

minus (F) other expenses agreed by the Client and Advisor from time to time, including, without limitation, the Advisor Fees.

For the avoidance of doubt, the sum of (ii) and (iii) (defined as the **Sub Account *Additional Capital Available***) should equal the true economic increase or decrease in the value in each existing Sub-Account.

and ***"Capital Needed"*** shall mean the sum of

(i) ***"Alpha"*** multiplied by the sum over all Us of the absolute value of the Total Net; and

(ii) ***"Beta"*** multiplied by the absolute value of the sum over all Us of the Total Net;

where:

(i) ***"Alpha"*** shall mean 0.0453216, and

(ii) ***"Beta"*** shall mean 0.2046784

6) Position Guidelines

"Current Barrier" shall mean, on each day the Capital Available **minus** the sum of all the amounts set forth in Table 1 Column D.

a) For each U, the absolute value of the Total Net shall be less than 40% of the Current Barrier.

b) For each U, the absolute value of the Total Net shall not exceed the greater of:

i) Three (3) times the average "daily dollar trading volume" in U, as measured over the ten previous Exchange Business Days, with the daily dollar trading volume for each day defined as the product of (i) the daily share trading volume on such day, and (ii) the day's closing price (expressed in USD); and

ii) 5% of Capital Available.

c) For each Industry, the absolute value of ***"Dollar Value per Industry"*** shall not exceed 100% of the Current Barrier where:

"Dollar Value per Industry" shall mean, with respect to each industry group to which the relevant Us are allocated (as defined by a mutually agreed upon model), the sum of the Total Net for all Us in that industry group.

d) For each sector, the absolute value of ***"Dollar Value per Sector"*** shall not exceed 125% of the Current Barrier where:

"Dollar Value per Sector" shall mean, with respect to each sector group to which the relevant Us are allocated (as defined by a mutually agreed upon model), the sum of the Total Net for all Us in that sector group.

e) The ***"Issuer Position"*** for any U shall not be greater than 3% of an issuer's total outstanding shares (and 2% in the case of ADR's, GDR's or similar of U.K. issuers) where:

"Issuer Position" for a U shall equal the algebraic sum of the number of shares in all Positions in such U in the Position Set, exclusive of Positions that are Derivative Instruments with negative Delta.

The above percentages may be adjusted from time to time by mutual consent of the Client and the Advisor.

B. Additional Trading Restrictions Applicable to Account

Hot and New Issues - Advisor shall not invest for the Account in securities the offering of which constitute "hot issues," or "new Issues" in accordance with NASD IM-2110-1 or any successor rule thereto adopted by NASD Regulation, Inc.

Restriction Level	Category	Permissible Activities
1.	***Full Restriction***	*As quickly as practicable (but no later than the close of business on the second Exchange Business Day on the relevant Exchange after a security initially appears on the Trade Restricted List), Advisor, defined below, is permitted, upon notice to the Client Service Representative, defined below, to eliminate exposure to the issuer of such security by selling all or any pre-existing long position or buying-in all or any pre-existing short position, at then-current market prices, (a) in ordinary market transactions or (b) in a transaction with an Unaffiliated Account, defined below, provided that securities transferred in (b) are not transferred back to the Account in a single transaction or series of transactions. After two Exchange Business Days on the relevant Exchange following notice of the restriction, the position will be frozen and the Advisor will be prohibited from trading the security until it is removed from the Trade Restricted List.*
2.	Offering	No trades are permitted without prior approval of the Client Service Representative (for the periods required by Regulation M, and other applicable laws, rules and regulations and policies of Deutsche Bank AG and its affiliates).
5.	***Affiliate Related***	*Advisor may, upon notice to the Client Service Representative, sell a pre-existing long position, sell short and/or buy-in a pre-existing short position. Such transactions should be executed at then-current market prices in accordance with the provisions of (a) and (b) in "Full Restriction".*
7.	**DB Investment**	No trades are permitted from the time the security goes on the Trade Restricted List.

Definitions:

Advisor: The investment advisor that has been retained by Deutsche Bank AG London to manage the Account.

Client Service Representative: Any officer of the Client (or its specified Affiliate) designated as such by the Client.

Trade Restricted List: The list of securities in which trading is restricted as provided by Deutsche Bank's Compliance Department from time to time.

Unaffiliated Account: An account managed by Advisor in which no Deutsche Bank entity has any beneficial interest.

APPENDIX II

November 16, 2007

Renaissance Technologies LLC
800 Third Avenue
New York, NY 10022

Dear Sirs:

With respect to the Amended and Restated Investment Advisory Agreement between **Deutsche Bank AG, London Branch,** ("Client") and **Renaissance Technologies LLC** (the *"Advisor"*), dated November 16, 2007 (the "*Agreement*"), the Advisor will receive a management fee of **USD 6,316,200** the *"Fee"*), of which USD 4,815,000 has already been paid by Client to Advisor.

The Fee shall be paid three (3) Exchange Business Days after the execution of the Agreement.

Very truly yours,

DEUTSCHE BANK AG LONDON

By: _____
Name: Satish Ramakrishna
Title: Attorney-in-Fact

By: _____
Name:
Title: Attorney-in-Fact

Agreed and Accepted:

RENAISSANCE TECHNOLOGIES LLC

By: _____
Name: Mark Silber
Title: Vice President

APPENDIX III

[List of Third Party Brokers pursuant to Section 3(c)]

NYSEARCA
Bloomberg
DOT
Jeffries Execution Services
NASDAQ
Instinet LLC

From: Mark J Hamilton <mark.j.hamilton@db.com>
Sent: Friday, December 21, 2007 6:35 AM
To: nicholas@rentec.com
Cc: Andrew Townend; Ben Lane; cconnor@rentec.com; eqtraders@rentec.com; Kevin Helton; scott@rentec.com
Subject: Re: Buy Back Request

Importance: Low

Nick

Trade as below
thx

DBAG London (NY) Rentech MAPS
HYBRID TRADE CONFIRMATION T/D 21-Dec-2007

BGHT 52,806 ABG.MC EUR 24.68480 GR 24.73417 NET V/D 28-Dec

==========
Global Markets Equity - Trading
Deutsche Bank
Phone:+44 20 7 545 5932
Email: mark.j.hamilton@db.com

==========

Nicholas Croce <nicholas@rentec.com> 21/12/2007 10:14

To: Mark J Hamilton/DMGCON/DMG UK/DeuBa@DBEMEA
cc: scott@rentec.com, eqtraders@rentec.com, cconnor@rentec.com, Ben Lane/db/dbcom@DBEMEA, Kevin Helton/db/dbcom@DBEMEA, Andrew Townend/db/dbcom@DBEMEA
Subject: Re: Buy Back Request

Permanent Subcommittee on Investigations
EXHIBIT #10

MH002603
RT-PSI-00004630

Mark,

Please buy to cover 52,806 shs AGB.SM and send us the execution. Also note we already bought 2,229 shs and shorted 305 shs on the day.

thanks, Nick

Mark J Hamilton wrote:
> Good Morning,
>
> We've been unable to maintain a borrow to fully cover your following
> short position.
> Please confirm your willingness to buy this position back as we're
> exposed
to
> being bought in (any cost / short sale fines will be passed on) Due
> to the illiquidity of this stock at present I must also ask you not to
> short any more.
>
> Outstanding position to buy back.
>
> Qty Ric Sedol
>
> 54,730 ABG.MC 7174823
>
>
>
> Best regards,
> Mark
>
>
> ==========
> Global Markets Equity - Trading
> Deutsche Bank
> Phone:+44 20 7 545 5932
> Email: mark.j.hamilton@db.com
>
> ==========
> ---
>
> This e-mail may contain confidential and/or privileged information. If
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> not the intended recipient (or have received this e-mail in error)
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> unauthorized copying, disclosure or distribution of the material in

> this e-mail is
strictly
> forbidden.
>
> Please refer to http://www.db.com/en/content/eu_disclosures.htm for
additional
> EU corporate and regulatory disclosures.
>

From: Jim Rowen <jrowen@rentec.com>
Sent: Tuesday, February 05, 2008 1:44 PM
To: Adrienne Browning
Subject: Re: UK MAPS

Importance: Low

excellent- and close to what this older guy remembers

Adrienne Browning wrote:
>
> not sure this is helpful, but its what I got....
>
>
> Adrienne S. Browning
> Managing Director, Tax Counsel
> 212 250 2610 (phone)
> 212 797 0325 (fax)
>
> _____
> Circular 230 Disclosure: To ensure compliance with requirements
> imposed by the IRS, we inform you that any tax advice contained in
> this communication (including any attachments) was not intended or
> written to be used, and cannot be used, for the purpose of (i)
> avoiding penalties under the Internal Revenue Code or (ii) promoting,
> marketing or recommending to another party any transaction or matter
> addressed herein.
>
> ----- Forwarded by Adrienne Browning/db/dbcom on 02/05/2008 01:41 PM
> -----
> *Steven Purvis/db/dbcom@DBEMEA*
>
> 02/05/2008 01:38 PM
>
>
> To
> Adrienne Browning/db/dbcom@DBAMERICAS cc
>
> Subject
> Re: do you remember.....Link
> <Notes:///85256C3A0015FA3E/38D46BF5E8F08834852564B500129B2C/5FC7F34381
> C7327B852573E6005C9268>
>
>
>
>
>
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>

Permanent Subcommittee on Investigations
EXHIBIT #11

>
>
>
> Adrienne,
>
> I remember little these days. All seems to blur into one!
>
> However, what you describe faced some general objection where DB could
> be argued to have been effectively fronting for an unregulated fund,
> i.e trading carried ostensibly in the name of DB as counterparty but
> the reality being that a third party fund was (a) actively trading and
> (b) DB on limited risk and (c) manager only partially subject to DB
> oversight. Not thought a good idea then and following the Soc. Gen,
> fiasco i imagine there would be even more twitching now
>
> In the context of trading UK & Irish Securities, it is the old Stamp
> Duty trap: need to be careful in picking up physical stock to hedge
> out CFD's and the order in which that happens. If trading existing
> synthetics should not be a problem but since nobody was clear on how
> it all would work and who the liability could fall on UK/Irish stuff
> was excluded anyway.
>
>
>
>
> Regards
>
>
>
> Steven
>
>
>
>
> *Adrienne Browning/db/dbcom@DBAMERICAS*
>
> 05/02/2008 17:00
>
>
> To
> Steven Purvis/db/dbcom@DBEMEA
> cc
>
> Subject
> do you remember.....
>
>
>
>
>
>
>

>
> what the analysis was for the following proposal: a MAPS (managed
> account) option, where the underlying assets were CFDs traded by
> DBL/UK. DBL would hire an investment advisor to trade the account,
> the assets of which are CFDs, and write an option on the account to a
> hedge fund. It is my understanding that we didn't do the trade due to
> UK regulatory/tax restrictions. Do you recall the rationale?
>
> Adrienne S. Browning
> Managing Director, Tax Counsel
> 212 250 2610 (phone)
> 212 797 0325 (fax)
>
> _____
> Circular 230 Disclosure: To ensure compliance with requirements
> imposed by the IRS, we inform you that any tax advice contained in
> this communication (including any attachments) was not intended or
> written to be used, and cannot be used, for the purpose of (i)
> avoiding penalties under the Internal Revenue Code or (ii) promoting,
> marketing or recommending to another party any transaction or matter
> addressed herein.
>
>
> ---
>
> This e-mail may contain confidential and/or privileged information. If
> you are not the intended recipient (or have received this e-mail in
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> in this e-mail is strictly forbidden.

--
James S. Rowen
Chief Operating Officer
Renaissance Technologies
800 Third Avenue, 35 Fl
New York, N.Y. 10022-7604
212-829-4492 (direct)

Deutsche Bank Maps
New Process/Procedures
As of May 15, 2008

Overview

The product offered by Deutsche Bank known as MAPS is being restructured in a number of ways; contractually, operationally (reporting and reconciliation) and economically. This document will detail the difference between the old and new as well as dictate any new development that would be required to accommodate the new product offering from an operational and accounting perspective. There are other changes with regards to the option confirms and investment management agreements (e.g., trading guidelines) and liquidation procedures that are not within scope of this document.

Old MAPS Structure vs. New MAPS structure

First, it is important to note what has not changed:

- Renaissance Technologies LLC is hired by Deutsche Bank to manage a DB Proprietary account based on a strategy implemented by Renaissance subject to certain negotiated trading guidelines.
- Deutsche Bank AG has written barrier options whereby the value is derived from the relative performance of this trading strategy. Franconia Equities Ltd and Mosel Equities LP (Medallion entities) have purchased these barrier options.
- These facts have NOT changed, (although certain trading guidelines have been renegotiated).

The following table highlights the important structural, operational and economic (financing) differences between the old and new structures:

ITEM	OLD	NEW	Comments
Option structure			
Option Style	American	European	Old style can be exercised at any time. New style is only exercisable at the expiration date. There are certain circumstances that allow for early termination, most of which requires the forfeiture of non-refundable premium (see below).
Premium	Bifurcated; Fixed and Amortizable	Bifurcated: Initial Intrinsic Value and Optionality Value	The value of the option is increased by the initial intrinsic value upon payment of premium. The Optionality Value is a non-refundable premium that is amortized over the life of the option
Strike Price	100	100	
Barrier	NO CHANGE	NO CHANGE	
Notification Level	Exists	Does not exist	
Underlying	Allocated NAV of the Trading Strategy	Performance of separate portfolios underlying each option	Each execution is ultimately allocated to each option (assuming multiple options) based on an allocation methodology (see below)
Production			
Trade Executions	NO CHANGE	NO CHANGE	
Trade File sent to Fund Accounting/Operations and DB	Unallocated (one account)	Allocated to sub-accounts underlying each option	Standard allocation algorithm derived by Fund Accounting. May be changed at RTLLC discretion.
Production operations (corp actions, etc)	NO CHANGE	NO CHANGE	

Fund Accounting			
Premium	NO CHANGE	NO CHANGE	While the different components of the premium do affect the valuation of the options, the accounting for the option premium on Mosel's books will not change (The new "Optionality Value" portion of the premium is amortized straight line over the life of the option, just like the Amortizable Premium in the old structure)
Valuation	Intrinsic value is based solely on the performance of the underlying strategy	Intrinsic value is based on "Initial Intrinsic Value" (see above) ***plus*** the performance of the underlying strategy	
Optionality Value ("OV")	Not Applicable	The amount of premium deemed to be derived from the interest component of the option	Formula agreed to by Rentec and DB calculated using the Anticipated Leverage Amount (see below)
Term Rate	Not Applicable	Rate used to calculate OV	Negotiated rate
Fund Operations			
Management/Performance Fee	Management Fee amount negotiated b/w Rentec and DB and paid upon exercise of the option	Performance Fee Rate negotiated b/w Rentec and DB. Fee is calculated; Rate * performance in excess of agreed benchmark. Fee is paid (and expensed) directly by the underlying sub-accounts on annual anniversary dates (effects intrinsic value)	Performance fee rate is tentatively set at 5%. Benchmark index is TBD
Cash Settlement Amount upon exercise	Intrinsic value plus premium minus management fee	Intrinsic value	
Cash Settlement Amount if DB early terminates without cause	Intrinsic value plus premium minus management fee	Intrinsic value plus any unamortized Optionality Value	
Cash Settlement Amount at other early termination events (not a knock out)	Intrinsic value plus premium minus management fee	Intrinsic value	
Anticipated Leverage Amount ("ALA")	Not Applicable	The amount of anticipated debit balance used to calculate Optionality Value	Negotiated b/w Rentec and DB
Debit Financing	Debit Balance[1] in the account * Fed Funds + 23 bps [1]Debit = Account debit minus premium	Debit Balance[1] in the account * Fed Funds + 23 bps [1]Debit = Account debit minus Initial Intrinsic Value minus Anticipated Leverage Amount	

Short Rebates/Fees	Aggregate Short Market Value ("SMV") * Fed Funds – 23 bps	**If SMV > ALA then** [(SMV – ALA) * (Fed Funds – 23 bps)] + ALA * (Term Rate – 23 bps) **ELSE** ALA * (Term Rate – 23 bps)	Both calculations are adjusted for rates on Hard-to-Borrow securities
Financing of International Securities	Through Swap	Initially no change – through swap. Eventually international securities will be executed as cash trades directly into the prop account and not in swap.	Financing rates on eventual currency balances TBD
Pink sheet executions. Occasionally the strategy attempts to trade securities that need to be manually booked by the DB swap desk (not electronically through Arina)	DB Swap desk will insert any manual executions into the Arina system for clearance and settlement. There is currently no process in place to communicate these trades to Rentec (results in a T+1 break that is rectified)	DB Swap desk will insert any manual executions into the Arina system for clearance and settlement. In addition they will communicate with the Rentec Fund Operations team who in turn will allocate those trades to different sub-accts underlying each option. Rentec will process this file in Total Return and also send the allocation file back to DB for processing	Happens Infrequently
Fractional Shares	NO CHANGE	Adjustments are required by Rentec Fund Operations group	All executions will be allocated to each sub-account by the Production process (see above) and should not result in fractional shares. However, fractional shares may arise from corporate actions or other adjustments. Rentech Fund Operations team will monitor the sub-accounts daily and will adjust to eliminate any unnecessary fractional shares. These adjustments will be communicated to DB.
Portfolio rebalancing due to Option Exercise	Not Applicable	Rebalancing required	Rentec Fund Operations group will reallocate the positions in the sub-account underlying the exercised option to the remaining options based on their relative cash settlement amounts as of COB the night of the Final Valuation Date (as per the option confirm) using the closing prices for each security on that date. This rebalancing will be communicated to DB. **SUBJECT TO ADJUSTMENT BY RTLLC.**
Portfolio rebalancing due to a new Option being purchased	Not Applicable	Rebalancing required	Rentec Fund Operations group will reallocate the positions in each sub-account underlying all options (including the new option) based on there relative cash settlement amounts of existing options and the premium paid on the new option. This rebalancing will be communicated to DB. **SUBJECT TO ADJUSTMENT BY RTLLC.**

Periodic Portfolio Rebalancing	Not Applicable	Rebalancing available	RTLLC may, at times, rebalance each underlying sub-account for any reason. This rebalancing would be driven by RTLLC and could be based on any criteria.
Short against the box	Not Applicable	Situations may arise where a security may be allocated to different sub-accounts resulting in different ownership proportions than other securities. This may in turn result in one or more sub-accounts being short a security and other sub-accounts being long the same security.	The Fund Operations group will monitor this situation daily and, where appropriate, journal positions from one sub-account to another as deemed necessary to eliminate this "cross sub-account short against the box". Otherwise financing calculations will be impacted that may result in unnecessary cost increases. This rebalancing will be communicated to DB
Communication of sub-account portfolios	Not Applicable	The Production group will occasionally need to have access to the portfolios within each sub-account.	A process needs to be developed to send data files to Production detailing the underlying positions in each sub-account.

From: Satish Ramakrishna <satish.ramakrishna@db.com>
Sent: Monday, June 16, 2008 4:12 PM
To: jrowen@rentec.com
Cc: Mark Haas; Frank X Nelson
Subject: Language
Attachments: C8488176.jpg

Importance: Low

Jim:

Please let me know your thoughts.

- Stagggering options: You wish to stagger options once every 3 months. My suggestion is that you stagger options by NAV also, so there is at least **6** points in NAV difference between different options. We of course can (though this is not something we would like to do) always refuse to trade with you if the NAVs are too close - this would also mean that you strategy has not done well since the last option trade and should make sense to you too.

- Limit on initial notional per option. You need 3.6 bln (so 200 mln USD premium) - we are fine with this with the NAV differential as above.

- NAV > Initial NAV + 5.5 (i.e., you have made at least 50% on the initial investment)

Leverage Framed in terms of capital needed Cure period

18-19 0.25%>(Cap Needed - Cap Available)/TGE >0 3d

19-20 0.50%>(Cap Needed - Cap Available)/TGEV >0.25% 2d

> 21 (Cap Needed - Cap Available)/TGE >0.50% immediate take over of portfolio

- NAV + 5.5 > Initial NAV (i.e., you have made less than 50% on the initial investment, but more than 0)

Leverage Framed in terms of capital needed Cure period

>18 (Cap Needed - Cap Available)/TGE >0 24 hrs

> 21 (Cap Needed - Cap Available)/TGE>0.50% immediate take over of portfolio

- NAV <= Initial NAV

your proposal => if NAV hits 95, we immediately take over the portfolio

my counter => if NAV hits 97.7, we immediately take over the portfolio (no 30d period etc)

- Otherwise, 5d cure periods for general guideline (all but the above) are OK, with the caveat that if >3 are breached together, then the cure period is 2d.

All the above is business days, not calendar days.

Best Regards,
Satish Ramakrishna
Deutsche Bank AG, London
Global Markets Equity
Global Prime Finance Risk & Complex Prime Finance
1342, 60 Wall Street, New York
+ 1 212 250 4928 New York
+ 1 [redacted]
+ 1. 212 250 4142/4051 Asst: Magdalena Pisarczyk

[redacted] = Redacted by the Permanent Subcommittee on Investigations

Global Prime Finance
Voted No.1
Global Prime Broker
Global Custodian,
Prime Brokerage Survey, 2008

A Passion to Perform. Deutsche Bank

From: CN=Satish Ramakrishna/OU=db/O=dbcom
To: CN=Axel Niemann/OU=db/O=dbcom@DBAPAC
cn=axel niemann/ou=db/o=dbcom@dbamericas
Date: Jun 17 2008 20:39:37
Subject: Re: What we need coded on PEAS apart from guidelines

Ok, let's talk. The upfront premium is not formally part of the NAV, however, you will notice that barriers are similarly moved down. The premium is like the amortizable premium in the earlier maps deal.

Best Regards,
Satish Ramakrishna
Deutsche Bank AG, London
Global Markets Equity
Global Prime Finance Risk & Complex Prime Finance
1342, 60 Wall Street, New York
+ 1 212 250 4928 New York
+ 1 [redacted]
+ 1. 212 250 4142/4051 Asst: Magdalena Pisarczyk

[redacted] = Redacted by the Permanent Subcommittee on Investigations

From: Axel Niemann
Sent: 06/18/2008 08:03 AM ZE8
To: Satish Ramakrishna
Subject: Re: What we need coded on PEAS apart from guidelines

I do not agree. At least from the last confirm I've seen, the realized funding is included in the NAV. Nothing is paid to us upfront. We only have a windfall gain IF the option knocks out and we don't have the to pay them back the future estimated funding.
Other than that, we have no exposure to longer term rates, only overnight funding spraeds as usual pb.

Axel Niemann
Deutsche Bank AG
Global Markets Equity
Global Prime Finance Risk & Complex Prime Finance
+852 2203 6491 (Hong Kong Office)
+[redacted]

(Embedded image moved to file: pic21590.jpg)Voted No.1 Global Prime Broker

Satish Ramakrishna/db/dbcom@DBAMERICAS
06/18/2008 12:54 AM
To: Parag Patel/NewYork/DBNA/DeuBa@DBEMEA, Axel Niemann/db/dbcom@DBAPAC, Bolon Wong/ext/dbcom@DBAmericas, Enrique Espinoza/db/dbcom@DBAMERICAS
cc: Eamon McCooey/db/dbcom@DBAmericas, Frank X Nelson/db/dbcom@DBAMERICAS
Subject

Permanent Subcommittee on Investigations
EXHIBIT #14

What we need coded on PEAS apart from guidelines

Strike is 100
Proposed Tenor: 2y
Let's say interest rates are fixed 2%
Premium: 100
anticipated leverage amt: (say) 600

The anticipated leverage amt is not randomly chosen. It is chosen so that the funding cost (which we will call the "optionality value") on the long side, which is (ignore funding spread)

600 x 2% x 2y = 24

is between 20%-25% of the initial premium (100 in the above).

Initial NAV: 108.436

this is because the funding spread is 2.664 (= 24/100 x 11.1). Note that Initial NAV + initial "optionality value" = 111.1

Initial barrier: 99.7 + (11.1 - 2.664) = 106.136
Knockout barrier: 94 + (11.1-2.664)

The optionality value declines every day as the funding is consumed. So if there were no performance in the account at all, but they did use the anticipated leverage,
- the NAV would creep up with short side rebate every day
- optionality value declines linearly every day to 0 on the expiry of the option
- the barrier creeps up - in NAV points, barrier = 99.7 + (Premium - Optionality Value)/Anticipated Leverage Notional and Optionality Value keeps falling each day, hence ...

Short side -

The long side financed amt is paid to us immediately at start
The short side financing - they receive a rebate rate = 2% (the agreed long side rate) - borrow cost, and this payment is at the end of the option..

We hence have interest rate risk in the mismatch of payment dates that will need to be hedged each time. The value of the "remaining part" (unrealized part) of this swap needs to be included in any unwind calculation of the trade.

Performance fees -
we need a calculator to deduct the performance fees off the NAV every day, with an opportunity to correct once a quarter.

IN ADDITION -

if they leverage more than the long side amount that we anticipated (which they might), we need to decrement the NAV to account for the funding on that portion. That will need some connection with Eamon's calculator - I don't want PEAS to build another funding calculator - EAMON - WE MIGHT NEED A FEED HERE

Things we need built
Optionality Value (in NAV points)
NAV at any time (including funding decrement on excess balances as well as
Notification Barrier at any time
Value of unrealized part of swap

Axel, Parag - Any points to add?

[redacted] = Redacted by the Permanent Subcommittee on Investigations

Best Regards,
Satish Ramakrishna
Deutsche Bank AG, London
Global Markets Equity
Global Prime Finance Risk & Complex Prime Finance
1342, 60 Wall Street, New York
+ 1 212 250 4928 New York
+ 1[redacted]
+ 1. 212 250 4142/4051 Asst: Magdalena Pisarczyk

(Embedded image moved to file: pic28130.jpg)Voted No.1 Global Prime Broker

=

Equity Prime Services

Managed Account Products

Option Account Profile

94150051 - DBAG MAPS Rentech Mosel Equities LP Option Account 1

As Of: 24-Jun-2008

Net NAV Index: 119.77
Percent to Barrier: 24.74

Net Asset Value

	Current Value	Change	Previous Value
Unrealized P/(L)	18,736,821.27	1,458,484.99	17,278,336.28
Realized P/(L)	478,500,357.41	5,326,294.61	473,174,062.80
Dividend Income	30,704,584.49	81,674.72	30,622,909.77
Dividend Expense	(16,455,718.57)	80,607.47	(16,536,326.04)
Bond Interest Income	0.00	0.00	0.00
Bond Interest Expense	0.00	0.00	0.00
Financing Interest Income	0.00	0.00	0.00
Financing Interest Expense	(27,959,989.34)	(99,755.06)	(27,860,234.28)
Short Rebates	25,321,257.15	76,132.05	25,245,125.09
Stock Loan Fees	0.00	0.00	0.00
Transaction Charges	(2,751,726.87)	0.00	(2,751,726.87)
Management Fees	0.00	0.00	0.00
Other P/(L)	0.00	0.00	0.00
Financial Differential	27,574,702.05	126,489.46	27,448,212.59
Net Asset Value:	**533,670,287.58**	**7,049,928.24**	**526,620,359.34**

Barrier Information

Barrier Index Level	6.00	Current Value to Barrier	668,095,585.53
Barrier Value	162,000,000.00	Current Percent to Barrier	24.74

Option Information

Notional Limit	2,700,000,000.00	Strike Price	100.00
Start Date	19-Nov-2007	Expiration Date	14-Nov-2010
Premium %	11.11	Premium Amount	299,999,999.70
Premium Amortization %	5.11	Amortizable Premium	137,999,999.70
Daily Amortization Amount	126,489.46	Fixed Premium	162,000,000.00
Total Amortization To Date	27,574,702.05	Cash Settlement Amount	806,095,585.23

* All data is based on Trade Date Information.

Permanent Subcommittee on Investigations
EXHIBIT #15

From: CN=Eamon McCooey/OU=db/O=dbcom
To: CN=Michael Ginelli/OU=db/O=dbcom@DBAmericascn=michael ginelli/ou=db/o=dbcom@dbamericas
Received(Date): Jun 25 2008 07:39:06
Subject: Re: Tentative: MAPS Working Group - Wednesday Sessions @ 3 PM - JuneMeetings

Mike,

I just don't think that will fly with Renaissance I will speak to Frank and Satish today to garner their opinions. The reason is what happens if one option is near breaching the barrier and they want to reallocate trades from that options to others that are at capacity while still being under the 33bn GMV threshold. Based on prior conversations they want to keep their flexibility around allocations.

Regards,
Eamon McCooey
Deutsche Bank Securities Inc.
Global Markets
Global Prime Finance
(212) 250-6856 - Office
[redacted]
(212) 250-6852 - Group Line

[redacted] = Redacted by the Permanent Subcommittee on Investigations

Michael Ginelli/db/dbcom
To
06/25/2008 07:31 AM
Eamon McCooey/db/dbcom@DBAmericas
cc

Subject
Re: Tentative: MAPS Working Group - Wednesday Sessions @ 3 PM - June Meetings

Ok. I have asked Parag to dial in. He and I spoke this morning. He suggested capping the notional limit at the option level rather than across the maps account. So rather than 33 bn for RenTec maps, you would have 6 bn for option 1, 7 bn for option 2, etc... It would be referenced in the Inv Mgmt agreement as being set per options. I am not sure that suggestion works, what do you think?

Permanent Subcommittee on Investigations
EXHIBIT #16

From: Eamon McCooey
Sent: 06/25/2008 07:25 AM EDT
To: Michael Ginelli
Subject: Tentative: MAPS Working Group - Wednesday Sessions @ 3 PM - June Meetings

From: Apollo Wong </O=GWEISS/OU=HTFD/CN=RECIPIENTS/CN=AWONG>
Sent: Thursday, July 10, 2008 4:06 PM
To: David Betten <dbetten@gweiss.com>
Subject: FW: George Weiss MAPS Investment Guidelines- PLEASE READ

From: Apollo Wong
Sent: Wednesday, July 09, 2008 3:56 PM
To: Susan Sevigny; Pierce Archer
Cc: Jennifer DeBeatham
Subject: RE: George Weiss MAPS Investment Guidelines- PLEASE READ

OK, thanks.

From: Susan Sevigny
Sent: Wednesday, July 09, 2008 3:56 PM
To: Apollo Wong; Pierce Archer
Cc: Jennifer DeBeatham
Subject: RE: George Weiss MAPS Investment Guidelines- PLEASE READ

I spoke with Joe Sclafani @ Wims. He will be able to do the crosses requested under Rule 11 & Rule 12 in the AM—not today. Tks, Susan

Susan C. Sevigny
Assistant Treasurer
George Weiss Associates, Inc.
One State Street-20th floor
Hartford, CT 06103
860-240-8954
scsevigny@gweiss.com

From: Apollo Wong
Sent: Wednesday, July 09, 2008 3:36 PM
To: Pierce Archer; Susan Sevigny
Subject: FW: George Weiss MAPS Investment Guidelines- PLEASE READ

Susan,
Please transfer all the positions mentioned in Rule 11 and Rule 12 to OGI account from the MAPS account. Thanks.
Apollo

From: Enrique Espinoza [mailto:enrique.espinoza@db.com]
Sent: Tuesday, July 08, 2008 11:57 AM
To: Apollo Wong
Cc: Satish Ramakrishna; Rafael Rojas; Joe Genovese
Subject: George Weiss MAPS Investment Guidelines- PLEASE READ

Hi Apollo,

Hope everything is fine. We see that your MAPS book is breaching some investment guidelines. We need you to comply with the investment guidelines as soon as possible.
Thanks.

Permanent Subcommittee on Investigations
EXHIBIT #17

Kind Regards,
Enrique

Enrique Espinoza, CFA
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Global Prime Finance Risk
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+44-(0)-20754-52644
enrique.espinoza@db.com

From: Eamon McCooey <eamon.mccooey@db.com>
Sent: Wednesday, July 30, 2008 9:31 AM
To: tkerns@rentec.com
Cc: Frank X Nelson; Jim Rowen; Peter Brophy; Satish Ramakrishna; jmayers@rentec.com
Subject: Re: Optionality Value
Attachments: C6766005.gif; C6011705.gif; graycol.gif; pic25411.gif; ecblank.gif

Importance: Low

Tom,

We have proposed your suggestion to McKee with regards to defining the Optionality Value and instead deriving the Option Cost Factor in the Option Confirmation. McKee has voiced no objections to the change [and has inserted the concept of Option Cost Factor in the new drafts] but Peter has raised some concerns that the new formula does not really flow well as it pertains to the Option Settlement Amount B calculation.

As we discussed the concern for changing the formula was to ensure that the Optionality Value as a percentage of the Total Premium was kept in a narrow band of approximately 20-21% and by defining the value it would always ensure that this ratio was maintained.

However, when you look at the calculation for the Cash Settlement Amount B, Peter's concern is that since optionality value is now a defined value that the concept of substitute term rate and term rate do not flow very well in terms of the calculation. We suggested that keeping the formula the existing way and instead manage the "Initial Leverage" value to ensure that the optionality value stays within the defined % ratio. For example, if the term rates go from 3% to 6% the Initial Leverage would be reduced from $600mm to $300mm. I understand you are away but if you want to call in for 5 minutes to discuss both Peter and myself are available.

The **greater of** (i) zero, and an amount determined as follows: (ii) the sum of (a):

$$(NAV Index\ Level - Strike\ Price) \times \frac{Notional\ Amount}{100}$$

plus (b) the Optionality Value, **plus** (c) the **greater of** (x) zero, and (y) an amount determined as follows:

$$Optionality\ Value \times (Substitute\ Term\ Rate - Term\ Rate) \times \frac{Remaining\ Tenor}{365}$$

Regards,
Eamon McCooey
Deutsche Bank Securities Inc.
Global Markets
Global Prime Finance
(212) 250-6856 - Office
[redacted]
(212) 250-6852 - Group Line

[redacted] = **Redacted by the Permanent Subcommittee on Investigations**

Permanent Subcommittee on Investigations
EXHIBIT #18

Thomas Kerns <tkerns@rentec.com>

Thomas Kerns
<tkerns@rentec.com>

07/25/2008 12:00 PM

To Eamon McCooey/db/dbcom@DBAmericas, Peter Brophy/db/dbcom@DBAmericas, Frank X Nelson/db/dbcom@DBAMERICAS, Satish Ramakrishna/db/dbcom@DBAMERICAS

cc Jim Rowen <jrowen@rentec.com>

Subject Optionality Value

Gents

This has been bugging me, so I thought I'd give it one more go....

First, a recap:
Currently we have a number of known variables and one unknown variable that we need to solve for
Known: Anticipated Leverage, Term Rate, Debit Spread and Tenor
Unknown: Optionality Value

The current formula is OV = (AL * (TR + DS)*Tenor) / (365+(TR * Tenor)). In other parts of the confirm the concepts of Optionality Value and Anticipated Leverage are integral in the calculation of debit and rebate financing

While this formula will give a desired result at the current interest levels, as interest rates increase (and we could potentially require a longer dated option) the Optionality Value could get prohibitively high even to the point of exceeding the total amount of premium.

I played around with other formulas but still came up against the same conundrum (I have never typed that word before).

Also, using a flat amount for Optionality Value does not work because of the concerns regarding the other financing calculations.

That's the recap....here is the idea.....

We talked about creating an Anticipated Leverage number (now call Initial leverage) based on a flat OV amount, but we thought that the resulting number was not representative of "leverage" and therefore would not work. BUT what if we left leverage out of the calculation altogether and used the formula that is in the confirm to create a number that we called the Option Cost Factor, or some other phrase the depicts that it was used to derive the initial cost of the option. The OV does represent a cost to us as this amount will amortize over the life of the option, so the concept of a "cost factor" is plausible.

The derived formula is as follows; instead of solving for the unknown OV, we actually negotiate a flat OV amount and the Option Cost Factor (which replaces the AL) becomes the unknown variable that we solve for. The resulting formula is as follows (unless someone smarter than me can reduce it):

Option Cost Factor = Optionality Value / (((Term Rate + Debit Spread) * Tenor) / (365+(Term Rate * Tenor)))

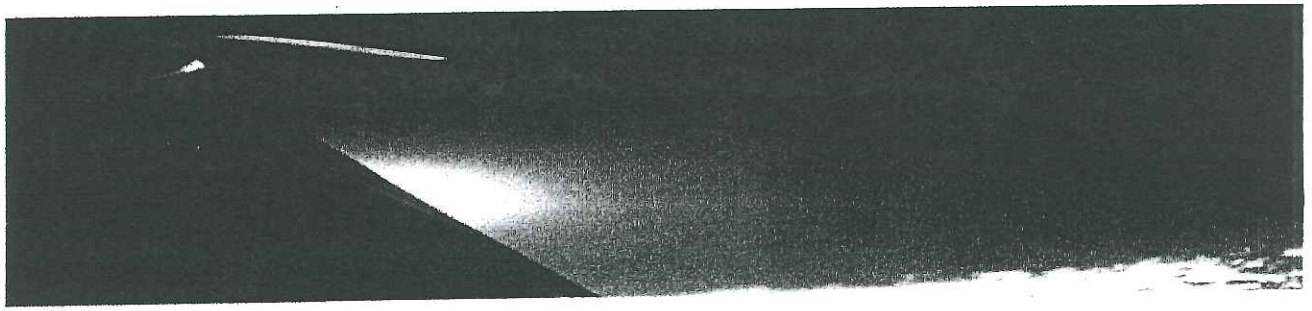
I believe this solves our two concerns. By setting the Optionality Value to a negotiated amount we can ensure that the number does not eat up too much of the premium and we can then replace the concept of Anticipated Leverage with the concept of an "Option Cost Factor" and which replaces the term "Anticipated Leverage" with "Option Cost Factor" throughout the confirm. Therefore all of the other financing calculations will work.

I ran this by Dan, Jim and Jonathan who are all ok with it. Your thoughts?????? Can we run this by MN?
TK

EXCERPT

GPF Business Development

CTB Program Portfolio



Global Prime Finance
September, 2008

A Passion to Perform.

Deutsche Bank

Deutsche Bank
GPF Business Development - CTB Program Portfolio

Product Development: Eamon McCooey

Month	Sep-2008
Overall status:	

Portfolio Summary	Portfolio Commentary
Global Prime Finance Change the Bank Programs.	Due to recent market conditions, we have focused some efforts on research and tactical developments to circumvent regulatory and reputational risks.

2008 Achievements Completed to Date	
Fidelity Action Compare released for golden source announcement data: Issues have been discovered with "golden source" due to operational workflow disconnects. Event Repository project to mitigate these issues: Qtr 1 2009	R
Client Rep Workstation: workflows released: (Prod) US and Intl Margin requirements validation and approval.	G
dbX security data integrity monitoring, and internal Margin equity change report released.	G
PB GO (version 1.4), Global On boarding application for new client opportunities has been released. Functionality includes online ORF, credit, legal and transition pipelines with MI reporting. This is the final 1.X release	G
Securities Lending Agent Lender disclosure feeds for RWA calculations have been implemented to comply with Basel II requirements.	G
Short without locate report in production. Report was regulatory requirement.	G
Tri-Party infrastructure completed. Dividend Capital and Proshares are the first two live Swap clients. Analytic will be the first live PB client (ETA: May 19th)	G
UCITS III product build-out with risk guidelines and monitoring has been implemented for Equity and Fixed Income clients. Advent Capital first client expected to go live in Q2.	G
MIS Pack (IPB Europe) Tactical developments completed, additional developments will be performed through the Global MIS project	G
Balance Sheet substantiation reports to close audit points in London.	G
Asset Services Stock Record and automatic calculation of manufactured positions for dividend processing.	G
SL Desk reporting for client position SLAM cross reference.	G
Asset Services: PB dividends automation - improved payment on payment date from 65% to 90%	G
Asset Services: Delivery of notifications lite in Asia and Europe.	G
Asset Services: Claims manager for UK business	G
Asset Services: Delivered tactical stock record for automating manual tasks within CA lifecycle.	G
Asset Services: Open Span automation for DBNY's International dividend balancing and closing process.	G
Upcoming Achievements	
Client Rep Workstation: Workflow releases include Non Receipts and Unfunded Currencies. (UAT) Tech Short alerts, Intl receipts, Alert Tasks, CSW Coverage	A
Geneva conversion continues with less than 10 to convert and about 20 in parallel.	
GlobalPrime 3.0 release with Reporting and Sec Lending enhancements with Technical infrastructure changes including Single Sign On.	A
Eclipse de-commissioning: Decommissioning of the legacy International PB platform. Once Geneva migration is completed, Eclipse will be continued to be utilized by Operations for Fail management.	
dbX Margin New ROR Conversion continues with a total 440 out of 551 relationships (79.9%) migrated to the new ROR	
FRM: London Algo initial release	A
Multi-MAPS: re-engineering of MAPS product	
PB GO future releases includes connectivity Paragon, functional enhancements, a Dashboard with MI and a client Pricing calculator.	

Deutsche Bank
GPF Business Development - CTB Program Portfolio

Product Development: Eamon McCooey

Month Sep-2008
Overall status:

Program Status, Costs and Comments

									TOTAL	2,198,560	17,442,640	Cost figures are represented in Euro
Current Program	Business Sponsor	Program Manager	Program State	Status	Confidence Level	Planned	Fcast / Actual	Variance	ME Costs	YTD Costs	Program Comments
Asset Optimization	T Fisher	R Marshall	Analysis		MED	Dec-08	Dec-08	0 Days	32,000	163,000	Consolidated from Rehypo and Depo projects
Client Service Workstation	C Perlman	M Ginelli	Development		MED	Dec-08	Dec-08	0 Days	269,000	2,297,000	
Data Integrity DBX	C Caruso	E McCooey	Development		LOW	Sep-08	Sep-08	0 Days	-	147,000	Update as of June 2008
Eclipse Decommissioning	J Dorman	M Ginelli	Development		HIGH	Jul-08	Oct-08	+69 Days	12,000	1,185,000	
FRM Cash & Liquidity Management	K Harrison	D Copans	Analysis		HIGH	Dec-08	Dec-08	0 Days	30,000	122,000	
Geneva Implementation	P Brophy	A Mandelbaum	Conversion	A	HIGH	Jun-08	Nov-08	+131 Days	559,000	2,778,000	
GFC Pricing Rules of the Road	K Harrison	D Copans	Analysis		MED	Dec-08	Dec-08	0 Days	2,000	71,000	
GlobalPrime Platform	E McCooey	P Yerrill	Development		MED	Aug-08	Nov-08	+92 Days	247,000	1,768,000	
GlobalPrime Securities Lending Portal	K Babbit	P Marshall	Development		MED	Oct-08	Dec-08	+68 Days	-	-	
GlobalPrime SLAM	A Byrne	P Marshall	Development		MED	Dec-08	Dec-08	0 Days	-	-	
GlobalPrime Trade Manager	M Haas	C Gulino	Analysis		MED	Apr-09	Apr-09	0 Days	62,000	342,000	
GME Asset Services	T Fisher	N Scott	Development	A	MED	Dec-08	-	0 Days	247,300	2,331,540	
GME Global Prime Finance Operations	S Palaniappan	T Fisher	Development	A	LOW	Dec-08	-	0 Days	164,260	1,218,100	
GPF: Operating Mode	C East	R Cairns	Development		MED	-	-	0 Days	-	92,000	Update as of June 2008
Information Security	C Caruso	C Gulino	Development		LOW	Dec-08	Dec-08	0 Days	-	287,000	Update as of August 2008
U.S. Inventory Management	P Busby	R Marshall	Development		HIGH	Dec-08	Dec-08	0 Days	59,000	157,000	
Multi MAPS Product	M Haas	E McCooey	Development		MED	Sep-08	Sep-08	0 Days		254,000	
Margin New ROR	F Nelson	W Shih	Conversion		MED	Dec-08	Dec-08	0 Days	206,000	905,000	
MIS	J Dewey	D Copans	Analysis		MED			0 Days	N/A	N/A	
PB-GO	D Dirvin	M Ginelli	Development	A	MED	Dec-08	Dec-08	0 Days	114,000	1,048,000	
Portfolio Margin	E McCooey	V Pfalzer	Development		MED	Jul-08	Oct-08	+69 Days	-	-	
Sec Lending Risk Monitoring	E McCooey	D Copans	Development		HIGH	Jul-08	Jul-08	0 Days	5,000	25,000	
Short Charging	E McCooey	D Copans	Analysis		MED	Oct-08	Oct-08	0 Days	15,000	80,000	
Quality and Stability	E McCooey	M LaMorte	Development		HIGH	Dec-08	Dec-08	0 Days	207,000	2,146,000	
New Projects	Business Sponsor	Program Manager	Program State	Status	Confidence Level	Planned	Fcast / Actual	Variance	ME Costs	YTD Costs	Program Comments
iDelta Future State	J Hammond	TBD	NEW		LOW			0 Days	N/A	N/A	New Approved Program
dbX Margin Indebtedness Allocation			NEW		MED			0 Days	N/A	N/A	
Project Changes	Business Sponsor	Program Manager	Change	Status	Confidence Level	Planned	Fcast / Actual	Variance	ME Costs	YTD Costs	Program Comments
Global Perfection	M Haas	C Foley	ON HOLD		HIGH	Aug-08	Aug-08	0 Days	0	14,000	On Hold pending prioritization.
Agent Autoborrow	T Fisher	D Copans	ON HOLD		MED			0 Days	0	5,000	Replace with a tactical approach for Short Charging
GlobalPrime Corporate Actions	T Fisher	C Gulino	ON HOLD		LOW	Sep-08	Sep-08	0 Days	0	34,000	On Hold pending resource commitment.
International Inventory Management	B Sofoluwe	R Marshall	ON HOLD		LOW	Dec-08		0 Days	0	84,000	On Hold pending resource commitment.
Online SWAP Manager	K Nealis	C Gulino	ON HOLD		LOW			0 Days	0	5,000	On Hold pending prioritization.
Self Funded '40 Act PB	C Caruso	M Ginelli	ON HOLD		LOW			0 Days	0	47,000	On Hold pending prioritization.
Completed Projects	Business Sponsor	Program Manager		Status			Actual Date			Costs	
Agent Lender Disclosure & Basel II compliance	J Hammond	D Copans	Completed	C							
RegSho Shorts-Locates	P Busby	D Copans	Completed	C							
Bank Loans: Prime Brokerage	T Fisher	S Kempton	Completed	C						56,000	
MIS Pack (IPB Europe)	C East	R Baxter	Completed	C						N/A	Future developments in the New GPF MIS Program

Deutsche Bank
GPF Business Development - CTB Program Portfolio

Product Development: Eamon McCooey

Month	Sep-2008
Overall status:	

Project Status: Legend for Project Scope Timelines

Milestone- is a checkpoint along the way in the workstream. Milestones should be specified such that it is easy to ascertain whether or not a milestone has been reached. Ideally milestones also provide line managers with useful results – the milestone then becomes both a checkpoint and a deliverable.
Project Milestones – High Level

Projects with a significant Technology development component can use the following milestones :
- Project Identification and Initiation **(PI)**,
- Business Analysis and Specification **(BA)**,
- Technical Specification **(TS)**,
- Technical Development **(TD)**,
- Integration Test **(QA)**,
- User Acceptance Test **(UA)**,
- Go-Live **(GL)**,
- Post Deployment **(PD)**.

The color coding is a RAG status on the milestone and the current and next forward month.
- **Red** color begins when project milestone is one month over the planned period.
- Amber color begins when project milestone is between the planned period and under one month.
- Green color remains throughout the planned period.
- **Blue** color on the milestone and month indicates the milestone is complete.

Project Status: Level
(Level of Confidence)

Con Level LOW is the lowest confidence level, where dates require additional sizing and confirmation. This level permits variability between 20 - 50%.

Level MED maintains a confidence level, where dates are committed and resources can be allocated. Phase plans dates are refined to coincide with detailed scopes and release schedules. This level permits variability between 20 - 50%.

Level HIGH has the highest confidence level, where the project is fully supported, planned and resourced. Approved Project scope will affect the project plan. This level permits variability between 10 - 20%.

Project Status: Issues and Risks

Issues
These differ from risks in that an issue will already be impacting progress, costs or benefits and action is required to bring the project back on track.
The text must summarize the issue and its impact, the action required to address the issue, and the owner of that action e.g.
- Issue: UAT delayed by insufficient user resource
- Action to address: hire 3 temps to backfill line resource

Risks
This section must be completed. Enter those risks that are rated as having greatest potential impact on the project goals. Areas to consider:
- The plan itself may have aspects of risk (i.e. does it assume that the project is fully mobilized and running from Day One?)
- Technical areas of high risk (i.e. is the technology new to us?)
- Decisions that are critical for progress (i.e. are decisions sensitive and confidential and can they create difficulties for open communication?)
- Resource requirement estimates (i.e. are estimates based on experience and does a systematic method of approach underpin the estimates?)
- Access to resources is often uncertain in a project (i.e. is sufficient time planed for sign off of requirements by management?)

The text must summarize the risk and its impact, mitigating action and the owner of that action, e.g.
- Risk: insufficient user resource to complete UAT on time

Project: New Multiple MAPS structure
Status: OPCO Submission

OpCo Sponsor: J Dorman / A Byrne
Business Sponsor: Frank Nelson
Product Manager: Eamon McCooey

Project State		
Development	Planned:	
	Forecast:	
	Current:	Sep-08

RAG	Prev	Curr
Progress:	A	A
Risks:		
Budget:		
Overall:		

Project Objectives

The object of this initiative is to provide a New Multiple MAPS structure that will more closely resemble a traditional options structure - premium risk. This new structure will require a major overhaul of our existing MAPS product / functionality such as the negotiation of new documentation, bifurcation of trading and risk across options / trading accounts, new MAPS defintions and calculations, new trade processing, CSR and risk management workflows.

Commentary

Project is already under way given the time sensitive nature of the project as well as the potential revenue risk

Project Benefits

Will enable us to more actively market this structure to new clients as well as protect existing revenue streams of the existing MAPS clients.

Business Impact
Prime Brokerage
Synthetic Equities

Infrastructure Impact:
BAC
IT

Active Project Milestones	Level	J	F	M	A	M	J	J	A	S	O	N	D
Project Phase 1	MED												
Project Anlaysis	MED												
Technical Infrastructure	MED					TD	TD	TD	TD				
GFC development													
PEAS Development	MED												
PB Tool box development	MED												
Workflow / Playbook development	MED												
Project Phase 2													

Project Milestones

A

Active Milestones	State	Commentary	RAG	Plan	Forecast	Var
Finalize Documentation	95%			16-May-08	31-Oct-08	+168 Days
Workflows / playbbooks	10%			31-May-08	30-Nov-08	+183 Days
						0 Days
						0 Days
						0 Days
						0 Days

Completed Milestones	Commentary	RAG	Plan	Actual	Var
Project Analysis - Phase 1	Complete	G			0 Days
IT development [GFC / PB / Risk]	Complete	G			0 Days
					0 Days
					0 Days
					0 Days

Issues and Risks

Issue	Action to address	Resp
Geneva development on existing MAPS structure	Need to complete	JF
Rentech's agreement on new File formats	Ability to process Geneva files	PB
Regulatory changes	No actions necessary	

Risk	Action to mitigate	Resp

Programme Costs / Benefits - Monthly Reporting Only

Sep

Euro (K)	Current Month Plan	Current Month Actual	Current Month Var	YTD Plan	YTD Actual	YTD Var	Full Year '08 Plan	Full Year '08 F'cast	Full Year '08 Var
Total	0	154	0	0	254	0	0	0	0
Business	0	50	(50)	0	150	(150)	0		0
Technology	0	104	(104)	0	104	(104)	0		0
Hardware / Vendor	0	0	0	0		0	0		0
Operations	0	0	0	0		0	0		0
Miscellaneous	0		0	0		0			0

Annualized Benefits (See Benefits page for detail)	Full Year '08			Full Year '09
Total				25,000

Additional Commentary

From: Apollo Wong <awong@gweiss.com>
Sent: Friday, October 10, 2008 5:14 PM
To: Rick Doucette <rdoucette@gweiss.com>
Subject: db maps account imbalance

just got a call from db claiming we have too much net long exposure in maps and want just to bring the porfolio back within 5% exposure within a week
maybe we can cross some position over to ybs next week

Sent from my iPhone3G