

## SUMMARY OF FACTS AND SUBMISSIONS

- I. European Patent No. 1 319 211 entitled "Click-based trading with intuitive grid display of market depth" is based on European Patent Application No. 01920183.9 which was filed as International Patent Application No. PCT/US2001/006792 on 2 March 2001. The International Patent Application was published as WO 01/65403. The patent claims rights of priority from

P1 US Provisional Application for Patent No. 60/186,322, filed on 2 March 2000,

P2 US Patent Application No. 09/590,692, filed on 9 June 2000.

The grant of the patent was mentioned on 13 April 2005 in European Patent Bulletin 2005/15.

The **Proprietor** of the patent is:

Trading Technologies International, Inc  
Chicago, Illinois 60606 (US)

A notice of opposition was filed on 12 January 2006 by a group of common opponents:

**Opponent I:**

Rosenthal Collins Group LLC  
Chicago, Illinois 60606 (US)

Peregrine Financial Group Inc  
Chicago, Illinois 60603 (US)

GL Trade SA  
75002 Paris (FR)

CQG Inc  
Denver, Colorado 80265 (US)

Further notices on oppositions were filed on 12 and 13 January 2006 by:

**Opponent II:**

Deutsche Börse AG  
60487 Frankfurt am Main (DE)

**Opponent III:**

tick-IT GmbH  
40210 Düsseldorf (DE)

**Opponent IV:**

Anitra Medienprojekte GmbH  
81677 München (DE)

**Opponent V:**

Eccoware Limited  
London EC2N 2LS (UK)

The notices of oppositions will hereinafter be referred to as **OP1** to **OP5**, respectively.

- II. The following evidences were indicated in the notices of oppositions; the numbering is introduced by the opposition division and will be adhered to in the rest of the procedure:

- D1 WO 99/19821 A1 (Derivatives Net Inc.) 22 April 1999  
[in OP1: "D1"; in OP3: "E1"; in OP5: "D4"]
- D2 WO 99/53424 A1 (Impink) 21 October 1999  
[in OP1: "D2"]
- D3 WO 98/49639 A1 (Lawrie) 5 November 1998  
[in OP1: "D3"]
- D4 US 5 297 031 (Gutterman et al.) 22 March 1994  
[in OP1: "D4"]
- D5 WO 91/14231 A1 (Chicago Board of Trade) 19 September 1991  
[in OP2: "E1"; in OP4: "A2"]
- D6 Tokyo Stock Exchange, *"Futures and Options Trading System - Transaction Terminal Operation Procedures"* (title also translated as *"System for Buying and Selling Futures and Options - Transaction Terminal Operational Guidelines"*), original Japanese version, August 1998  
[in OP1: "Exhibit 1"; in OP2: "E4"; in OP5: "D1(1)"]
- D6' Collection of pages of D6, original Japanese version, comprising: cover page, table of contents pages 1 to 4, pages 2-1, 3-6, 5-1, 7-1, 7-17, 7-21, 7-22, 7-25, 7-26, 9-5, appendix page 4-1 of D6  
[in OP1: part of "Exhibit 4 Japanese version", see pages "TSE" 628 to 643]

- D6a Partial English translation of D6 provided by Opponents I and V, translation of the following pages of D6:  
cover page, pages 5-2 to 5-19, 6-3 to 6-10, 6-24, 6-25, 7-13 to 7-20, 7-23, 7-24, 9-1 to 9-4, 9-6 to 9-32  
[in OP1: part of "Exhibit 2", from page "TSE" 647 to page "TSE" 810; in OP5: "D1(2)"]
- D6b Partial English translation of D6 provided by Opponents I and II, translation of the pages of D6 comprised in D6':  
cover page, table of contents pages 1 to 4, pages 2-1, 3-6, 5-1, 7-1, 7-17, 7-21, 7-22, 7-25, 7-26, 9-5, appendix page 4-1  
[in OP1: part of "Exhibit 4 English version", see pages "TSE" 628 to 643; in OP2: "E4 translation"]
- D6c Partial English translation of D6 provided by Opponent V, translation of the pages of D6 comprised in D6':  
cover page, table of contents pages 1 to 4, pages 2-1, 3-6, 5-1, 7-1, 7-17, 7-21, 7-22, 7-25, 7-26, 9-5, appendix page 4-1  
[in OP5: "D1(3)"]
- D7 Tokyo Stock Exchange, "*Orientation Materials for Participants - New Future Options Trading System*", original Japanese version, September 1997  
[in OP1: part of "Exhibit 4 Japanese version", see pages "TSE" 609 to 627; in OP2: "E5"]
- D7a English translation of D7 provided by Opponents I and II  
[in OP1: part of "Exhibit 4 English version", see pages "TSE" 609 to 627; in OP2: "E5 translation"]
- D8 Tokyo Stock Exchange, "*Volume: Systems - Collected Records and Data, 50-Year History of the Tokyo Stock Exchange*", original Japanese version, 31 July 2000  
[in OP1: part of "Exhibit 4 Japanese version", see pages "TSE" 644 to 646]
- D8a English translation of D8 provided by Opponent I  
[in OP1: part of "Exhibit 4 English version", see pages "TSE" 644 to 646]



- D9 *Notice of opposition by Tokyo Stock Exchange Inc. filed on 18 April 2005 at the Japanese Patent Office, original Japanese version*  
[in OP1: part of "Exhibit 4 Japanese version", see pages "TSE" 982 to 995]
- D9a English translation of D9 provided by Opponent I in "Exhibit 4 English version"  
[in OP1: part of "Exhibit 4 English version", see pages "TSE" 982 to 995]
- D9b English translation of D7 provided by Opponent I in "Exhibit 2"  
[in OP1: part of "Exhibit 2", see pages "TSE" 982 to 995]
- D10 *Transcript of deposition of Mr. Atsushi Kawashima on 21 November 2005 in Case No. 04-C-5312 in The United States District Court for the Northern District of Illinois between Trading Technologies International, Inc. (Plaintiff) and eSpeed, Inc. (Defendant)*  
[in OP1: "Exhibit 3"]
- D11 LIFFE, *"The Application Program Interface (API) Reference Manual - For LIFFE CONNECT, Release 2.7, September 1998"*  
[in OP1: "Exhibit 5"]
- D12 LIFFE, *"The Application Program Interface (API) Reference Manual - For LIFFE CONNECT, Release 3.0, September 1998"*  
[in OP1: "Exhibit 6"]
- D13 LIFFE, *"The Application Program Interface (API) Reference Manual - For LIFFE CONNECT, Release 3.1, September 1998"*  
[in OP1: "Exhibit 7A"]
- D14 LIFFE, *"The Application Program Interface (API) Reference Manual - For LIFFE CONNECT, Release 3.2, December 1998"*  
[in OP1: "Exhibit 7B"]
- D15 LIFFE, *"The Application Program Interface (API) Reference Manual - For LIFFE CONNECT, Release 3.3, January 1999"*  
[in OP1: "Exhibit 7C"]



- D16 LIFFE, "*Directory of Software Solutions - For LIFFE CONNECT*", Issue 1, October 1998  
[in OP1: "Exhibit 8A"]
- D17 LIFFE, "*Directory of Software Solutions - For LIFFE CONNECT*", Issue 2, February 1999  
[in OP1: "Exhibit 8B"]
- D18 LIFFE, "*Directory of Software Solutions - For LIFFE CONNECT*", Issue 3, June 1999  
[in OP1: "Exhibit 8C"]
- D19 Slides of a presentation "*LIFFE's New Electronic Trading Platform for Futures*", ISV Developers Conference, 24 September 1998  
[in OP1: "Exhibit 8D"]
- D20 Promotional material "*IRIS Investment Support Systems*"  
[in OP1: "Exhibit 10"]
- D21 *Transcript of deposition of Mr. Paul MacGregor* on 1 November 2005 in Case No. 04-C-5312 in The United States District Court for the Northern District of Illinois between Trading Technologies International, Inc. (Plaintiff) and eSpeed, Inc. (Defendant)  
[in OP1: "Exhibit 9A"]
- D22 LIFFE, "*APT Trading Procedures (Atom version) of the London International Financial Futures Exchange*", 28 March 1991  
[in OP1: "Exhibit 9B"]
- D23 LIFFE, "*APT User Guide*", January 1994  
[in OP1: "Exhibit 9C"]
- D24 LIFFE, "*Attachment to General Notice No. 788 - APT<sup>plus</sup> Trading Procedures*", 28 December 1995  
[in OP1: "Exhibit 9D"]
- D25 GL Trade, "*GL TRADE - User Guide V4.51 - LIFFE CONNECT for Futures by GL TRADE*", June 1999  
[in OP1: "Exhibit 11"]
- D25' Collection of pages of D25 comprising: cover page, pages 28, 29 and 31 to 35  
[in OP5: "D2"]

- D26 GL Trade, brochure *"Trading Pad"* (8 pages)  
[in OP2: "E2"]
- D27 GL Trade, *"Guide d'utilisation GLWIN et Logiciels complémentaires"*, collection of 8 pages  
[in OP2: "E3"]
- D28 Print-out dated 10 January 2006 of webpage with URL:  
<http://web.archive.org/web/19980629135037//>  
[http://www.tiffe.or.jp/e\\_html/new\\_on.html](http://www.tiffe.or.jp/e_html/new_on.html)  
[in OP3: "E2"]
- D29 OM Gruppen AB, *"OM CLICK Trade User's Guide for Windows NT"*, October 1998  
[in OP1: "Exhibit 14"]
- D30 Research & Trade AB, "ORC Instructions for Use - Version 2.2.8", 1999  
[in OP4: "A3" (complete document)]
- D30' Collection of pages of D30, comprising: cover page, table of contents, pages 1-16 and 1-17, index  
[in OP4: "A3"]
- D31 F. Maguire, *"Firms rush to make Liffe Connect decision"*, Banking Technology 8, 4 December 1998  
[in OP2: "E6"]
- D32 *Trading Technologies brochure*  
[in OP2: "E7"]
- D33 *"Data Broadcasting Partners with All-Tech Investment Group to provide Customers with Integrated Online Trading"*, PR Newswire, 25 February 1999  
[in OP2: "E8"]
- D34 *"MINEX Service Outline (User Test/Orientation)"*, November 1992  
[in OP2: "E9"]
- D35 US 5 960 411 (Hartman et al.) 28 September 1999  
[in OP5: "D3"]

- D36 *Memorandum Opinion and Order of Senior Judge J.B. Moran in Case No. 04-C-5312 in The United States District Court for the Northern District of Illinois between Trading Technologies International, Inc. (Plaintiff) and eSpeed, Inc. (Defendant), 9 February 2005*  
[in OP1: "Exhibit 12", in OP5: "D5"]
- D37 J. Sandman, *"Trading Technologies upgrades software for its platform"*, Securities Industry News, 28 August 2000  
[in OP5: "D6"]
- D38 Figure 2 of WO 01/65403, i.e. the International Patent Application on which the patent is based  
[in OP1: "Exhibit 13A"]
- D39 US Provisional Application for Patent No. 60/186,322, i.e. P1  
[in OP1: "Exhibit 13B"]

Opponent III offered in OP4 witness proof (Mr. Kenichiro Ohara, Tokyo Financial eXchange Inc., Tokyo, Japan) for facts relating to the "TIFFE" system shown in D28 and used at the Tokyo International Financial Futures Exchange in 1996-1998.

- III. Opponent I requested in OP1 the revocation of the patent in its entirety based on the grounds that the subject-matter of the patent is excluded from patentability, is not new and does not involve an inventive step (Articles 100 (a), 52(1), 52(2)(c) and (d), 54 and 56 EPC 1973) and that the subject-matter of the patent extends beyond the content of the application as filed (Article 100(c) EPC 1973).

More particularly, Opponent I argued in OP1 that the subject-matters of all claims extended beyond the content of the application as filed (Article 100(c) EPC 1973) by pointing to specific features and terms of the independent claims. Decision T 331/87 was cited in this respect.

The subject-matters of all claims were considered to be excluded from patentability by Article 52(2)(c) and (d) EPC 1973 as presentations of information, methods of doing business and/or programs for computers.

The claims to priority from P1 and P2 were considered to be invalid.

Opponent I argued that the subject-matters of independent claims 1 and 29 were:

- not new over D1



- not new over D4
- not new over D6 and related prior use "TSE" (D9 and D10 cited as evidence)
- not new over "LIFFE Connect Prior Art Manuals" D11 to D15 (D21 cited as evidence)
- not new over the "IRIS system" shown in D20 (D16 to D19 cited in this context)
- not new over the "APT system" shown in D22 to D24 (D21 cited as evidence)
- not new over D25
- not new over a prior use of the invention by Mr. Harris Brumfield, one of the named inventors (D36 cited as evidence)
- not inventive over "X\_Trader", as shown in D38 and D39, combined with D4
- not inventive over a combination of any two of D1, D4 (the reference to "D2" in point 72 of OP1 appears to be an error that should be read "D4" in view of the context), D6 and D11 to D19
- not inventive over a combination of D29 and D6 and D11 to D19

Furthermore, the subject-matters of all claims were considered not to involve an inventive step because they do not represent a technical solution to a technical problem. Decision T 258/03 was cited in this respect.

Opponent I indicated at several occasions in OP1 that further details and evidences relating to the prior art would be provided.

- IV. Opponent II requested in OP2 the revocation of the patent in its entirety based on the grounds that the subject-matter of the patent is not new and does not involve an inventive step (Articles 100(a), 52(1), 54 and 56 EPC 1973), that the patent does not disclose the invention in a manner sufficiently clear and complete for it to be carried out by a skilled person (Article 100(b) EPC 1973), and that the subject-matter of the patent extends beyond the content of the application as filed (Article 100(c) EPC 1973). Oral proceedings were requested on an auxiliary basis.

More particularly, Opponent II argued in OP2 that the subject-matters of all claims extended beyond the content of the application as filed (Article 100(c) EPC 1973) by pointing to specific features and terms of the independent claims and of some dependent claims.

It was objected that claims 13 and 28 define subject-matter which the skilled person is not enabled to carry out (Article 100(b) EPC 1973).

Opponent II argued that the subject-matters of the independent claims were:

- not new over D5
- not new over D26 and D27
- not inventive over D6 or D7
- not inventive over D6 or D7 in view of D31 to D34

The subject-matters of all dependent claims were considered to lack novelty and/or inventive step; reference was made to D5 to D7, D26, D27, D32 and D34 for individual features.

V. Opponent III requested in OP3 the revocation of the patent in its entirety based on the grounds that the subject-matter of the patent is excluded from patentability, is not new and does not involve an inventive step (Articles 100 (a), 52(1), 52(2)(c) and (d), 54 and 56 EPC 1973). It was requested that oral proceedings be held before the final decision.

More particularly, Opponent III argued in OP3 that the subject-matters of independent claims 1 and 29 were excluded from patentability by Article 52(2) (c) and (d) EPC 1973 as presentations of information and/or as methods for doing business.

Opponent III argued that the subject-matters of the independent claims were:

- not new over D28 and related prior use "TIFFE" (witness proof offered)
- not inventive in view of a combination of D1 and D28

The additional features of the dependent claims were considered to be either known from D1 and D28 or obvious.

VI. Opponent IV requested in OP4 the revocation of the patent in its entirety based on the grounds that the subject-matter of the patent is excluded from patentability, is not new and does not involve an inventive step (Articles 100 (a), 52(1), 52(2) and (3), 54 and 56 EPC 1973) and that the subject-matter of the patent extends beyond the content of the application as filed (Article 100 (c) EPC 1973). Oral proceedings were requested on an auxiliary basis.

More particularly, Opponent IV argued in OP4 that the subject-matters of all claims extended beyond the content of the application as filed (Article 100(c) EPC 1973) by pointing to a specific feature of independent claim 1.

The subject-matters of all claims were considered to be excluded from patentability by Article 52(2) and (3) EPC 1973 as they relate to methods of doing business and lack a technical character. Decisions T 1173/97 and T 769/92 were cited in this respect.



Opponent IV argued that the subject-matters of the independent claims were:  
- not new over D5  
- not inventive over a combination of D5 and D30'

The subject-matters of all dependent claims were considered to lack novelty and/or inventive step.

VII. Opponent V requested in OP5 the revocation of the patent in its entirety based on the grounds that the subject-matter of the patent is excluded from patentability, is not new and does not involve an inventive step (Articles 100 (a), 52(1), 52(2)(c) and (d), 54 and 56 EPC 1973) and that the subject-matter of the patent extends beyond the content of the application as filed (Article 100(c) EPC 1973). Oral proceedings were requested on an auxiliary basis.

More particularly, Opponent V argued in OP5 that the subject-matters of all claims extended beyond the content of the application as filed (Article 100(c) EPC 1973) by pointing to specific features and terms of the independent claims.

The subject-matters of all claims were considered to be excluded from patentability by Article 52(2)(c) and (d) EPC 1973 because independent claim 29 was directed to presentation of information and methods for doing business, independent claim 1 to means for implementing such methods, and independent claim 53 to a program for computers, and because the dependent claims did not add technical character. Decision T 258/03 was cited in this respect.

The claims to priority from P1 and P2 were considered to be invalid.

Opponent V argued that the subject-matters of the independent claims were:

- not new over D6
- not new over D25'
- not new over D1
- not new over a prior use of the invention by Mr. Harris Brumfield, one of the named inventors (D36 and D37 cited as evidence; decisions T 270/90 and T 743/89 cited)
- not inventive over the prior art cited in the patent and common general knowledge (decisions T 641/00, T 258/03 and T 125/04 cited)
- not inventive over D6, D25' or D1 combined with common general knowledge or D35

Several additional features of the dependent claims were considered to be anticipated by D6 and/or D25'.



It was indicated that D6 and D25' as well as the systems described therein were made available to the public before 2 March 2000 and that further facts, evidence and arguments in relation to D6 and D25' and to prior uses of the systems disclosed therein would be provided in due course.

Opponent V suggested that the Opposition Division should consider which steps could be made to further investigate the prior use of the invention by Mr. Brumfield on the basis of Article 117(3) EPC 1973 and Rule 72(1) EPC 1973.

- VIII. In a communication dated 21 February 2006, the Opposition Division invited the Proprietor to file observations and, where appropriate, amendments to the patent within a period of 4 months.
- IX. In a letter dated 5 April 2006 and received at the EPO on 10 April 2006 (hereinafter referred to as **OP1-1**), the common representative of Opponent I indicated that common opponent Peregrine Financial Group Inc. wished to withdraw from the opposition proceedings. Additionally, oral proceedings were requested on an auxiliary basis on behalf of Opponent I.
- X. Following requests by the Proprietor dated 3 July 2006 and 3 August 2006, the time limit for replying to the communication dated 21 February 2006 was extended from 4 months to 7 months (communication dated 11 August 2008).
- XI. In a fax received at the EPO on 3 October 2006 (hereinafter referred to as **PA1**), the Proprietor replied to the notices of oppositions and requested the maintenance of the patent as granted. Oral proceedings were requested on an auxiliary basis.

As regards the ground of opposition under Article 100(c) EPC 1973, arguments were given as to why none of the objected claims extended beyond the content of the application as filed.

As regards the ground of opposition under Article 100(b) EPC 1973, it was contested that claims 13 and 28 could not be carried out by a skilled person.

As regards the ground of opposition under Article 100(a) EPC 1973, it was submitted that the patent was not excluded from patentability by Article 52(2) and (3) EPC 1973 because it was directed to a trading tool that provides a technical solution to a technical problem, namely that of ensuring not only that the speed of order entry can be improved but that this increase in speed is not achieved at the expense of accuracy.

As regards the objection of lack of inventive step linked to the issue of technical character, it was argued that the features of the invention contributing to the solution of that technical problem could not be disregarded. Reference was also made to decision T 49/04 to support the technical character of features of the invention.

It was submitted that the claims to priority from P1 and P2 were valid; reference was thereby made to G 2/98.

As regards the prior art relied upon in the notices of oppositions, the Proprietor contested that documents D6, D7, D25/D25', D26, D27, D30/D30' and the systems disclosed therein belong to the state of the art as no satisfactory proof therefor had been provided by the opponents. In the absence of such proof, these disclosures should not be considered admissible. In particular, Mr. Kawashima's deposition (D10) is not considered a sufficient proof for the allegation that D6 and the associated system form part of the prior art.

It was pointed out that Mr. MacGregor's deposition (D21) is not prior art and cannot be used as such.

As regards the alleged prior use "TIFFE" (related to D28), the Proprietor further requested that Opponent III provides as soon as possible the substance of the testimony of their witness, Mr. Ohara.

As regards the alleged prior use by Mr. Brumfield, it was submitted that the burden of proof was on the opponents and that in any case Mr. Brumfield's use of a prototype of the invention was confidential and did therefore not constitute a prior public use.

The Proprietor gave detailed reasons as to why the invention was new and inventive over the (alleged) prior art relied upon by the opponents.

The Proprietor noted finally that several opponents indicated that further evidence relating to cited documents and systems would be provided in due course and submitted that such further evidence should not be admitted.

- XII. With a letter dated 26 September 2006 and received at the EPO on 10 October 2006 (hereinafter referred to as **OP1-2**), Opponent I submitted new evidences:



- D40 Slides of a presentation "*Wit Digital Stock Market*" (29 slides)  
[in OP1-2: "Exhibit 15"]
- D41 Collection of pages from a book by A.D. Klein, "*WallStreet.com - Fat Cat Investing at the Click of a Mouse - How Andy Klein and the Internet Can Give Everyone a Seat on the Exchange*", Henry Bolt and Company, 1998  
[in OP1-2: "Exhibit 16"]
- D42 *Declaration of Walter D. Buist* dated 26 April 2006 in Case No. 05-CV-4088 in The United States District Court for the Northern District of Illinois between Rosenthal Collins Group, LLC (Plaintiff) and Trading Technologies International, Inc. (Defendant)  
[in OP1-2: "Exhibit 17"]

Opponent I submitted that "Wit Digital Stock Market" was a computer program which had been available in 1999 and anticipates the subject-matter of claim 1. D40 corresponds to a presentation compiled in February 1999. D40 to D42 are presented as providing details of Wit Digital Stock Market and are provided to the Opposition Division to assess the relevance of these evidences to the claims. Opponent I indicated that further evidence regarding the public availability of Wit Digital Stock Market would be provided.

- XIII. Following several enquiries by the Proprietor and the Opposition Division noting that "Exhibit 17" (D42) as submitted with OP1-2 was incomplete, a complete copy of "Exhibit 17" (D42) was finally submitted by Opponent I with a letter dated 19 April 2007 and received at the EPO on 26 April 2007.
- XIV. In a letter dated 16 October 2008 and received at the EPO on 18 October 2008, Opponent III notified the change of its name and address to
- Tick Trading Software Aktiengesellschaft  
40212 Düsseldorf (DE)

## PRELIMINARY OPINION OF THE OPPOSITION DIVISION

### 1 *Admissibility of the oppositions*

The oppositions are considered to be admissible because they comply with the requirements of Articles 99(1) and 100 EPC 1973 as well as of Rules 1(1) and 55 EPC 1973 and, in respect of Opponent I, of Rule 100(1), last sentence, EPC 1973 (the provisions of EPC 1973 apply to the issue of admissibility because the notices of opposition were filed before the date of



entry into force of EPC 2000, see T 1279/05, point 2.1, T 1194/07, point 2 and T 25/08, point 3). The admissibility of the oppositions has not been disputed by the proprietor.

2 *Opponent I - Withdrawal of Peregrine Financial Group Inc.*

Following the statement made in OP1-1 by the common representative of Opponent I, Peregrine Financial Group Inc. does no longer belong to the group of common opponents referred to as Opponent I (although remaining in principle subject to any decision yet to be taken under Article 104 EPC, see G 3/99, point 15).

**Article 100(c) EPC 1973 - Added subject-matter**

- 3 Opponents I, II, IV and V oppose the patent on the ground that the subject-matters of all claims of the patent extend beyond the content of the application as filed (Article 100(c) EPC 1973).

The International Patent Application published as WO 01/65403 represents the application as filed.

The Opposition Division notes that the Proprietor cites paragraphs of the published *patent* to support features of the granted claims in view of objections raised by the Opponents under Article 100(c) EPC 1973. Basis for these features should however be found in the *application as filed*. In the following, the Opposition Division converts therefore the references to passages of the published patent provided by the Proprietor in response to the objections under Article 100(c) EPC 1973 into references to the corresponding passages of the application as filed.

In the following, all the issues raised the Opponents are addressed.

4 **Article 100(c) EPC 1973 - Independent claim 1**

Independent claim 1 as granted, which is directed to a client device for receiving commands relating to a commodity being traded on an electronic exchange, appears to be based on original independent claim 35, which is directed to a client system for placing a trade order for a commodity on an electronic exchange.

#### 4.1 *Display of market depth (deletion)*

The client system of original claim 35 comprises a

*"display device for displaying the market depth of a commodity traded in a market, through a dynamic display of a plurality of bids and a plurality of asks in the market for the commodity, including the bid and ask quantities of the commodity".*

The client device of claim 1 as granted comprises means for displaying a "first indicator" and a "second indicator" associated, respectively, with the current highest bid price and the current lowest ask price for the commodity. Claim 1 as granted requires thus means for displaying indicators related to the internal market but not necessarily means for displaying the market depth, as in original claim 35.

Opponents I, II and V argue that it is not directly and unambiguously derivable from the application as filed that displaying only the highest bid price and the lowest ask price was intended at the time of filing the application. They argue that the feature of displaying the market depth is an essential feature of the invention in the application as filed, this feature being included inter alia in all the original independent claims and in the section "summary of the invention" of the original description. The conditions specified in T 331/87 are therefore not met.

The Proprietor contests that displaying the market depth is an essential feature of the invention in the application as filed. T 331/87 is therefore considered to be irrelevant. The Proprietor points to page 8, lines 13 to 17, of the application as filed. The Proprietor further argues that the invention retains its benefits even if no market depth is displayed. Reference is made to page 14, line 29 to page 15, line 5 with reference to figures 3 and 4 of the application as filed to show that only the inside market really matters.

The Opposition Division tends to agree with the Proprietor that claim 1 as granted does not extend beyond the content of the application as filed in this respect.

Reference is made to the paragraph bridging pages 7/8 of the application as filed:

*"The preferred embodiments of the present invention include the display of "Market Depth" [...] Market Depth represents the order book with the current bid and ask prices and quantities in the market. In other words, market depth is each bid and ask that was entered into the market, subject to the limits*



noted below, in addition to the inside market. For a commodity being traded, the 'inside market' is the highest bid price and the lowest ask price."  
(underlining added)

The limits referred to in this passage are addressed at page 8, lines 13 to 17:

"How far into the market depth the present invention can display depends on how much of the market depth the exchange provides. Some exchanges supply an infinite market depth, while others provide no market depth or only a few orders away from the inside market. The user of the present invention can also chose how far into the market depth to display on his screen."  
(underlining added)

It appears to follow directly and unambiguously from these two passages of the application as filed that the "present invention" may display only the inside market without any additional bid or ask.

The assertion of the Opponents that the display of market depth - understood as the display of bids and asks that were entered into the market *in addition to the inside market* - is an essential feature of the invention in the application as filed is not followed by the Opposition Division in view of the above-mentioned passages. This finding is furthermore consistent with the fact that the description of the operation of the invention from page 14, line 29 to page 15, line 15 in combination with figures 3 and 4 focuses on the display and movement of the internal market, as noted by the Proprietor.

#### 4.2 "Field of static prices"

Claim 1 as granted refers to a "field of static prices" whereas original claim 35 refers to a "static display of prices".

Opponents I and V argue that the expression "field of static prices", with emphasis on the term "field", is an impermissible generalisation of what is disclosed in the application as filed.

The Proprietor states that this expression is clearly supported by the description and refers to the minutes of the oral proceedings before the Examining Division, in which it is indicated that the Examining Division suggested the last paragraph of page 12 as a possible basis for an amendment.

The Opposition Division considers that claim 1 as granted does not extend beyond the content of the application as filed in this respect.

As regards the use of the term "field" in respect of the display of prices, it is noted that the description refers mainly to a "column of prices" or to a "price column" because this is how prices are displayed in the embodiment shown in figures 3 and 4 but it is also made clear in the description (page 15, lines 17 to 23) that the same information can be displayed in an horizontal fashion or in other orientations. The paragraph bridging pages 12/13 uses the term "field" as a generic term which does not imply a vertical orientation when discussing the general idea of the invention:

*"A vertical field is shown in the figures and described for convenience, but the field could be horizontal or at an angle [...] In the preferred embodiment of the invention, the Mercury display is a static vertical column of prices with the bid and ask quantities in vertical columns to the side of the price column and aligned with the corresponding bid and ask prices. An example of this display is shown in Figure 3."* (underlining added)

The use of the term "field" in granted claim 1 is therefore considered to have sufficient support in the application as filed.

As regards the use of the expression "static prices" in "field of static prices", this appears to have sufficient support in page 13, lines 14 to 18, of the application as filed (*"[t]he values in the price column are static"*).

#### 4.3 *First and second indicators*

Claim 1 as granted specifies means for displaying a first resp. second indicator at a first resp. second area aligned with a first resp. second price level in a field of static prices, the first resp. second indicator being associated with the current highest bid resp. lowest ask price for said commodity.

Opponents I, II and V argue that no "first and second indicators" are mentioned in the application as filed. These terms represent impermissible generalisations as they cover realisations not directly and unambiguously derivable from the application as filed, e.g. highlighting the inside market by colouring the respective cells or providing for arrows pointing to the inside market. Furthermore, the highest figure in the BidQ column and the lowest figure AskQ column in figure 3 do not even qualify as movable indicators since they disappear as soon the respective quantities change.

The Proprietor argues that the first and second indicators show the best bid price and the best ask price, and that indicators associated with these prices move along the field of static prices, referring thereby to page 7, line 28 to page 8, line 3, page 13, lines 5 to 12, and page 14, line 29 to page 15, line 5 of the application as filed. The Proprietor further submits that the invention is



not limited to how the best bid price and the best ask price are actually indicated, referring thereby to page 15, lines 7 to 15. Only the visualisation of their relative movement matters, not the particular graphical identification of the inside market.

The Opposition Division tends to agree with the Opponents that claim 1 as granted extends beyond the content of the application as filed in this respect.

The features "means for displaying a first indicator ..." and "means for displaying a second indicator ..." in granted claim 1 relate to how the internal market is displayed.

None of the original claims contains features relating to how the internal market is displayed in the sense of how the information of what the current highest bid price and lowest bid price are is conveyed to the user on the screen.

This is addressed in the description in relation to the embodiment of the invention illustrated by figures 3 and 4. In this embodiment, there is no explicit display of the internal market but the user can identify the internal market by identifying the highest price in the price column 1004 for which a bid quantity is displayed in BidQ column 1003 and the lowest price in price column 1005 for which an ask quantity is displayed in AskQ column 1005 (page 13, lines 8 to 10, and page 14, line 32 to page 15, line 2). The internal market is thus conveyed to the user in an implicit manner on the basis of the display of the bid and ask quantities in the BidQ and AskQ columns and their relative positions with respect to the prices in the price column.

The Proprietor quotes the sentence "*Usually a trader will want to be able to see the inside market to assess future trades*" at page 15, lines 9/10 and presents it as suggesting that it does not matter how the inside market is visualised. The Opposition Division does not agree. Read in the context of the paragraph in which it is included, this sentence explains merely the motivation for providing a re-centering command.

As noted by Opponent II, the wording of the objected features of granted claim 1 cover explicit display of the internal market without any display of bid and ask quantities, e.g. by highlighting price levels or by using special symbols adjacent to prices in the field of static prices. The Opposition Division considers this to be an impermissible generalisation of the embodiment illustrated by figures 3 and 4 in which the display of the internal market is intimately tied to the display of bid and ask quantities in the BidQ and AskQ columns.

It is noted that while original independent claims 1, 8 and 15 do not specify that bid and ask quantities are displayed, they do also not contain any feature directed to how the internal market is displayed and cannot therefore support the generalisation.

#### 4.4 *Display of bid and ask quantities (deletion)*

Opponents I, II and V argue that claim 1 as granted extends beyond the content of the application as filed in that it does not require a display of bid and ask quantities, as original claim 35 does.

The Proprietor points to original dependent claim 4 which specifies that the displayed bids and asks include bid and ask quantities, thereby indicating that actual quantities do not have to be displayed in original independent claim 1.

The Opposition Division tends to consider that claim 1 as granted extends beyond the content of the application as filed in this respect.

As noted by the Proprietor, original independent claims 1, 8 and 15 require dynamic displays of a plurality of bids and of a plurality of asks in market without mentioning bid and ask quantities. Only dependent claims 4, 11 and 18 add that "said displayed bids and asks in the market include bid and ask quantities of the commodity". The wording of independent claim 15 is repeated in the section "Summary of The Invention" of the description as filed (page 5, lines 4 to 11). The mere fact that original independent claim 35 specifies a display of bid and ask quantities may therefore not be a sufficient reason to object that granted claim 1 extends beyond the content of the application as filed for failing to require such a display.

However, as noted at point 4.3 above, granted claim 1 contains features directed to the display of the highest bid price and the lowest bid price in the market, i.e. the internal market, which may be seen as representing an intermediate generalisation between original independent claim 15 and the embodiment illustrated by figures 3 and 4. It is only in this embodiment that a display of the internal market is mentioned and there it is intimately tied to the display of bid and ask quantities. Hence, by failing to require a display of bid and ask quantities associated with the specified display of the internal market, granted claim 1 is directed to an intermediate generalisation extending beyond the content of the application as filed.



#### 4.5 *Update of the display of the first and second indicators*

Opponent II argues that the feature of claim 1 as granted that the client device comprises

*"means for updating the display of the first and second indicators, wherein in response to new data representing a different highest bid price and/or lowest ask price of the commodity received from the interface, at least one of the first and second indicators is moved relative to the field of static prices to a different area aligned with a different price level within the field of static price"*

has no basis in the application as filed, objecting in particular to the feature that the update happens "in response to" new data representing a different highest bid price and/or lowest ask price. The client device in the application as filed may rather collect any incoming data and update the display not earlier than in response to a received command or on a regular basis.

The Proprietor points in particular to page 14, line 29 to page 15, line 5 with reference to figures 3 and 4.

The Opposition Division tends to agree with the Proprietor that claim 1 as granted does not extend beyond the content of the application as filed in this respect.

The passage at page 14, lines 29/30, cited by the Proprietor

*"The inside market and market depth ascend and descend as prices in the market increase and decrease."*

suggests a direct relationship between movement of prices in the market and visualisation of movement of the inside market and market depth on the screen and, therefore, a direct relationship between reception of new highest bid price and/or lowest ask price from the electronic exchange and visualisation of movement of the inside market on the screen.

This reading finds further support when considering the application as a whole. It is noted at page 8, lines 30 to 32, that in the prior art described in relation to figure 2 "[p]rices and quantities for the inside market and market depth update dynamically on a real time basis as such information is relayed from the market" (page 8, lines 30 to 32). While this is said here for the prior art described in figure 2 and not for the invention described in figures 3 and 4, the skilled person would not expect something substantially different from the invention when reading the above quoted passage at page 14, lines 29/30. The skilled person would thereby also take into account the general remarks made in the section "Background of the invention" of the description: that it is of utmost importance that a trader's software enables the trader to react as

quickly as possible to price changes (page 3, lines 1 to 8) and that the present invention provides a speed advantage in what is described as being the slowest portion of the trading cycle: the time required for the trader to read the prices displayed and to enter a trade order (accounting for approximately 80% of the time it takes to enter an order) as opposed to the portion of time between the moment the host generates a price and the moment the client application displays the received price to the trader (accounting for approximately 12%). See page 3, line 20 to page 4, line 2.

The Opposition Division tends therefore to consider that the use of the expression "update ... in response to ..." in granted claim 1 does not convey technical information that would go beyond the content of the application as filed.

#### 4.6 *"Means for setting a trade order parameter"*

Opponents I and V argue that the feature "means for setting a trade order parameter" in claim 1 as granted is an impermissible generalisation over the language of the application as filed.

The Proprietor argues that no supporting reasons for this objection have been given by the Opponents. The feature is considered to be clearly supported by the description, but no specific basis is indicated by the Proprietor.

The Opposition Division considers that claim 1 as granted does not extend beyond the content of the application as filed in this respect.

Various means for setting trade order parameters are disclosed on page 14 in combination with figure 3 (page 14, line 1: "*Various parameters are set and information is provided in column 1002*"), e.g. cells 1013 and 1014 for setting the "Current Quantity" defined as "*the quantity for the next order that the trader will send to the market*" (page 14, lines 9 to 15). It is also noted that original independent claim 35 refers to "preset parameters" in relation to setting the characteristics of the trader order. This points towards the involvement of means for setting these parameters without limitation to specific parameters. These passages read in combination appear to constitute a sufficient basis for the feature "means for setting a trader order parameter" in claim 1.

#### 4.7 *Areas of the order entry region*

Claim 1 as granted includes the feature that the client device comprises

*"an order entry region comprising a plurality of areas, each area being aligned with a price level in the field of static prices and each area being selectable by a user input means, the order entry region being configured such that*



*selection of one of the plurality of areas sends an order message to the electronic exchange based on the trade order parameter and the price level that is aligned with the selected area".*

Opponents I and II argue that the plurality of selectable areas for order entry are not limited to the dynamic display of bids and asks, as in the application as filed, and that this constitutes an impermissible generalisation. The scope of the claim covers for example a series of aligned buttons next to the field of static prices. Additionally, the term "area" is broader than the term "cell" used in the application as filed.

The Proprietor argues that the invention is not so limited. What is important is that the selected area corresponds to a price, not whether it is in the display of bids and asks. Reference is made to page 15, line 25 to page 16, line 4.

The Opposition Division tends to agree with the Opponents that claim 1 as granted extends beyond the content of the application as filed in this respect.

As noted by Opponent II, according to original independent claim 35, a placement of a trade order is initiated through a single action of the user input device with a pointer of the user input device positioned *"over an area in said dynamic display of bids and asks"*, whereby the displayed bids and asks include the bid and ask quantities. The objected feature of granted claim 1 is broader in that it allows the selectable areas for sending an order message to be separate from any display of bids and asks.

It is first noted that there is no explicit suggestion of a generalisation in this sense in the application as filed. Furthermore, contrary to the submission of the Proprietor, the description of the embodiment shown in figures 3 and 4 relies substantially on the feature that the selectable areas are within the display of bids and asks, in particular to determine whether a buy or a sell order is to be sent. See:

- equations on page 16, lines 6 to 19, used by the system to generate the trade order, involving conditions "If BidQ field clicked" and "If AskQ field clicked",
- page 16, lines 26/27 (*"If the trader clicks in a trading cell - i.e. in the BidQ or AskQ column, he will enter an order in the market"*),
- page 19, lines 14 to 18 in combination with figure 6 (*"In step 1304, the system determines whether the cell clicked is a tradeable cell (i.e. in the AskQ column or BidQ column). If not then in step 1305, no trade order is created or sent and, rather, other quantities are adjusted or functions are performed based upon the cell selected."*),
- page 20, lines 8 to 14, in combination with figure 6 (*"the system, in step*

1313, determines which column was clicked, BidQ or AskQ. If AskQ was clicked, then, in step 1314, the system sends a sell limit order to the market at the price corresponding to the row for the total quantity as already determined. If BidQ was clicked, then in step 1315, the system sends a buy limit order to the market at the price corresponding to the row for the total quantity as already determined").

Removing the feature of original independent claim 35 that the selectable areas for sending order messages are areas of the dynamic display of bids and asks would therefore require a real modification of the algorithm implemented by "the trade order characteristics setting component" in original independent claim 35. The generalisation in granted claim 1 does thus not appear to be permissible.

#### 4.8 "User input means" / pointer, single action

Opponents I and V argue that the "user input means" in claim 1 as granted is an impermissible generalisation of the "user input device for positioning a pointer thereof over an area in said dynamic display of bids and asks and for initiating placement of a trade order of the commodity through a single action of the user input device" recited in original claim 35, the specific features of a pointer and a single action being essential features of the invention in the application as filed. Reference is made in this respect to page 15, line 28, page 16, line 24, page 28, lines 1 to 3, and to the title of the application as filed.

The Proprietor argues that these specific features are not essential to the invention.

The Opposition Division tends to agree with the Opponents that claim 1 as granted extends beyond the content of the application as filed in this respect.

The wording of original claim 35 cited by the Opponents must be read in combination with the statement made at page 6, line 27 to page 7, line 2 of the application as filed:

*"Further, the specification refers to a single click of a mouse as a means for user input and interaction with the terminal display as an example of a single action of the user. While this describes a preferred mode of interaction, the scope of the present invention is not limited to the use of a mouse as the input device or to the click of a mouse as the user's single action. Rather, any action by a user within a short period of time, whether comprising one or more clicks of a mouse button or other input device, is considered a single action of the user for the purposes of the present invention."*



From this it appears to be clear that any user input means with which an area on the screen can be selected through a "single action" of the user input means can be used in the invention.

The use of the expression "a user input means" in granted claim 1, in combination with the specification that the areas are "selectable" by the user input means" and that a "selection" sends an order message appears thus to be a permissible generalisation of the "user input device" for positioning a "pointer" thereof over an area recited in original claim 35.

Missing in granted claim 1 is however the requirement that the "selection of one of the plurality of areas" that "sends an order message" is made through a "single action" of the user input means. The wording of granted claim 1 seems to allow the selection of an area to involve multiple actions of the user input means, e.g. clicking on the area followed by moving the pointer to an OK button in a pop-up confirmation window and clicking on it to confirm selection of the area.

As noted by the Opponents, the feature that sending an order message is performed by means of a "single action" of the user input device/means appears consistently in whole application as filed: see independent claims 22, 29 and 35 as well as page 7, lines 28 to 31, page 15, lines 28/29, page 16, lines 23/24 and 26/27 and the automatic process illustrated in figure 6 which is triggered by a click over a cell in the Mercury display by the trader, as noted at page 19, lines 14/15. No basis for the generalisation in granted claim 1 is apparent.

Furthermore, the application as filed (page 12, lines 29 to 31) puts forward *"increas[ing] the speed of trading and the likelihood of entering orders at desired prices with desired quantities"* as the technical problem solved by the proposed order entry method over the prior art shown in figure 2. The "single action" feature of original claim 35 is indispensable for the function of the invention in the light of the technical problem it serves to solve: it is because of this feature that fast trading is enabled and it is because of the use of this feature that the likelihood of entering orders at desired prices is an issue (addressed by the further features of static display of prices combined with dynamic display of bids and asks). Hence, the deletion of the "single action" feature in granted claim 1 is not permissible.

4.9 *Order entry region / "trade order characteristic setting component"*

Opponents I and IV argue that the feature that the client system of original claim 35 comprises

*"a trade order characteristic setting component for setting characteristics of the trade order based in part upon preset parameters and the position of the pointer at the time of said single action"*

is an essential feature of the invention as filed. Its generalisation in claim 1 as granted as an

*"order entry region being configured such that selection of one of the plurality of areas sends an order message to the electronic exchange based on the trade order parameter and the price level that is aligned with the selected area"*

is considered to have no basis in the application as filed.

The Proprietor points to page 16, line 30 to page 17, line 4 of the application as filed as providing support for the feature of granted claim 1.

The Opposition Division tends to consider that claim 1 as granted extends beyond the content of the application as filed in this respect.

The passage from page 16, line 30 to page 17, line 4 cited by the Proprietor seems to be give sufficient support for not explicitly reciting "a trader order characteristic setting component" as in original claim 35.

However, in original claim 35, the position of the pointer at the time of the single action is said to be involved in setting characteristics of the trade order. From the passage cited by the Proprietor, it is clear that not only the price level that is aligned with the cell selected by the pointer is involved but also whether the pointer and thus the selected cell is within the BidQ or AskQ column as this determines whether the trader order is a sell or a buy order.

The objected feature of granted claim 1 generalises both original claim 35 and the passages cited by the Proprietor in that it only requires the price level that is aligned with the selected area to be involved in the definition of the order message. A basis in the application as filed for this generalisation is not apparent.

5 **Article 100(c) EPC 1973 - Independent claims 29 and 53**

Opponents I, II, IV and V argue that similar objections under Article 100(c) EPC 1973 apply to granted independent claims 29 and 53 as they include features corresponding to those of granted independent claim 1.



The preliminary opinion of the Opposition Division on the objections under Article 100(c) EPC 1973 raised against granted independent claim 1 applies similarly to the corresponding objections raised against granted independent claims 29 and 53.

6 **Article 100(c) EPC 1973 - Dependent claims**

Opponents I, II, IV and V argue that the subject-matters of all dependent claims as granted extend beyond the content of the application as filed (Article 100(c) EPC 1973) at least because of the objections raised against the independent claims on which they depend.

Additionally, Opponent II raises objections against additional features of the following dependent claims:

6.1 *Claim 3: "order type"*

Granted claim 3, in combination with granted claim 2 on which it depends, adds the following features to granted claim 1: the client device according to claim 1 is *"configured to set a plurality of parameters for the order message in response to selection of one of the plurality of areas of the order entry region, wherein the plurality of parameters include the price that is aligned with the selected area and an order type, the order type comprising a buy order or a sell order"*.

Opponent II argues that the application as filed discloses sending a sell limit order or a buy limit order depending on whether the selected cell is within the BidQ or the AskQ column. There is disclosure of setting an order type parameter.

The Proprietor notes that a buy or a sell order is an order type.

The Opposition Division tends to agree with Opponent II that granted claim 3 extends beyond the content of the application as filed in this respect.

Page 16, line 30 to page 17, line 4 as well as page 20, lines 8 to 14, disclose determining whether to send a "sell limit order" or a "buy limit order" in the manner explained by Opponent II. Original claim 36 refers more generally to determining whether a "sell order" or a "buy order" is to be sent.

The wording *"to set a plurality of parameters ... includ[ing] ... an order type, the order type comprising a buy order or a sell order"* used in granted claim 3 is ambiguous and does not appear in the application as filed. It can fairly be read as meaning to set a parameter indicating the order type, whereby the order type *can be* a buy order or a sell order *but may also be another instance of order type*. This wording allows thus a determination to be made as to

whether the trade order is e.g. a buy limit order, a buy stop order or a price limit order (see e.g. **D5**, pages 6 to 8, for a list of common order types including buy and sell limit orders among many others).

While it appears not excluded in the invention that such kind of distinction may be set by the user *prior* to selection of an area of the order entry region, there is no disclosure that any determination regarding order type other than whether it is a buy or a sell order is made *in response to* selection of such an area. It is noted that at page 16, lines 6 to 19, conditions on whether the right or the left mouse button has been used and on which mode has been selected are involved to select the equation to determine the order quantity. The order type does however not appear to be affected by these conditions. See also figure 6.

The Opposition Division fails therefore to see a basis for the generalisation in granted claim 3.

6.2 *Claims 5, 6, 34, 35: re-centering command / action of the user input device*

Granted claim 4 adds to granted claim 1 that the client device further comprises "*means for re-centering the price levels within the field of static prices about an inside market in response to receipt of a re-centering command*". This has not been objected to.

Opponent II objects the additional features of granted claims 5 and 6:

- granted claim 5 (dependent on claim 4): "*the command comprises a predetermined action of a user input device*",
- granted claim 6 (dependent on claim 5): "*the predetermined action comprises a single action of the user input device at a predetermined area*".

It is considered that whereas the application as filed mentions only a single mouse click as user input action, the scope of these additional features is broader as it includes e.g. keystroke operations or double-clicks. The same objections are raised against corresponding granted claims 34 and 35.

The Proprietor notes that at page 14, lines 14 to 16, the term "re-centering command" is kept broad to include manual and automatic re-centering and refers to page 15, lines 7 to 15 for more detailed examples.

The Opposition Division tends to consider that granted claims 5, 6, 34 and 35 do not extend beyond the content of the application as filed.

As regards granted claim 6, it is noted that the passage at page 15, lines 7 to 15, refers to a single mouse click at any point within the gray area as a re-centering command. It is clear from page 6, line 27 to page 7, line 2 that



references to a "single click of a mouse" in the description are to be read as non-limiting examples of a single action of the user. The other re-centering command disclosed in this passage is a click on the middle button of a three-button mouse, which represents also a single action of the user. Granted claim 6 appears thus to be directly and unambiguously derivable from the application as filed.

As regards granted claim 5, the feature that the re-centering command "*comprises a predetermined action of a user input device*" covers embodiments going beyond those disclosed at page 15, lines 7 to 15, read in combination with page 6, line 27 to page 7, line 2, for example multiple mouse actions not performed in a short time but arguably forming together a "predetermined action".

While the Opposition Division tends not to agree with the Proprietor's interpretation of page 14, lines 14 to 16, as referring to both manual and automatic re-centering commands (this issued is addressed at point 16 below), it is noted that original claim 20 refers explicitly to a "re-centering instruction from a user" and provides thereby support for a re-centering command issued by a user but not limited to a single action of the user.

At present, it is not apparent to the Opposition Division that the feature "*the [re-centering] command comprises a predetermined action of a user input device*" in granted claim 5 would provide additional technical information over the feature disclosed in the application as filed that the received re-centering instruction or command is from a user. It appears that the wording of granted claim 5 covers in fact any realisation of a re-centering command issued by a user as any such command would require the user to use a "user input device" and to perform some "predetermined action" to issue the command. On the basis of this understanding of granted claim 5, the Opposition Division tends to consider that it does not extend beyond the content of the application as filed.

Similar considerations apply to granted claims 34 and 35.

### 6.3 *Claims 8 and 47: areas in which the indicators are displayed*

Opponent II argues that the additional feature of granted claims 8 and 47 refer to displaying the first and second indicators in one of a plurality of areas in a bid and an ask display region, respectively, whereas the application as filed discloses only these indicators being the *highest resp. lowest figure* of the BidQ resp. AskQ columns. Granted claims 8 and 47 cover a display of the first and second indicators in other areas and this has no basis in the application as filed.

The Proprietor refers to figures 3 and 4 as showing a display of the first and second indicators in different areas.

The Opposition Division tends to agree with Opponent II but notes that this objection is in fact closely related to the objection relating to the use of the terms "first indicator" and "second indicator" in granted claim 1, see point 4.3 above.

6.4 *Claim 13: horizontally oriented regions comprising columns (by dependency)*

Opponent II argues that, in one alternative, granted claim 13 depends on granted claim 11 and that this combination implies the feature of bid and ask display regions which comprise columns of aligned cells (claim 11) and *are* oriented horizontally (claim 13). There is no basis in the application as filed for this feature.

The Proprietor refers to figures 3 and 4, showing columns of aligned cells, as well as to page 4, line 29 to page 5, line 1, page 6, lines 8 to 12, page 12, lines 4 to 8 and lines 26 to 29 and page 15, lines 17 to 23 as disclosing that vertical, horizontal and other orientations are possible.

The Opposition Division agrees with Opponent II that granted claim 13 extends beyond the content of the application as filed insofar it is dependent on granted claim 11.

It is agreed with the Proprietor that the invention as disclosed in the application as filed it not limited to a vertical orientation. It is however considered that in the case of a horizontal orientation the columns described in the main embodiment would become rows. The combination of the wordings "comprising columns" and "oriented horizontally" arising from the dependency of granted claim 13 on granted claim 11 does not make sense and has no support in the application as filed.

6.5 *Claims 14, 15, 50 and 51: bid/ask display regions overlapping order entry region*

Opponent II argues that the wording "overlaps" used in granted claims 14, 15, 50 and 51 implies that the bid and ask display regions would extend over the order entry region and cover a part of it. This has no basis in the application as filed.

The Proprietor submits that these claims are clearly supported.

The Opposition Division agrees with Opponent II.

No support for the bid and ask display regions extending over the order entry region is apparent in the application as filed.



6.6 *Claims 22, 23 and 44: "last trade indicator"*

Opponent II argues that granted claims 22, 23 and 44 referring to a "last trade indicator" are broader than justified by the application as filed for similar reasons to those raised with respect to the first and second indicators in granted claim 1.

The Proprietor refers to page 13, lines 18 to 20, and argues that how the last traded price and last traded quantity are indicated is not important.

The Opposition Division tends to agree with Opponent II.

In the passage cited by the Proprietor, the last traded price is conveyed to the user in an implicit manner via the relative position of a display of the last traded quantity with respect to the static price values. The wording of granted claims 22, 23 and 44 covers explicit indication of the last traded price without display of the last traded quantity. No basis for this generalisation is apparent.

6.7 *Claim 25: first and second indicators comprise numbers*

Opponent II argues that granted claim 25 specifies the first and second indicators comprise numbers but the application as filed is devoid of any mentioning of numbers other than bid/ask quantities.

The Proprietor notes that bid/ask quantities are numbers and that original dependent claim 4 states that the displayed "bids and asks" include bid and ask quantities, thereby indicating that actual quantities do not have to be displayed in original independent claim 1.

The Opposition Division tends to agree with Opponent II. For the reasons given at point 4.3 above, in the application as filed, the display of the internal market, the function performed by the first and second indicators, is intimately tied to the display of bid and ask quantities. A generalisation to the display of other kind of numbers does not appear to have a basis in the application as filed.

6.8 *Claim 28: portion of field of static prices displayed in column / dependencies*

Opponent II argues that the additional feature of granted claim 28 "at least a portion of the field of static prices is displayed in a column with a plurality of cells" implies that only a portion of the field of static prices may be displayed in a column and that this has no basis in the application as filed.

Opponent II argues furthermore that granted claim 28 covers in one alternative a combination of granted claim 1 with the additional features of granted claims 8, 13 and 28 and that such a combination specifies a field of static prices displayed in a column, i.e. vertically, in combination with

indicators which move along the field of static price and are displayed in horizontally oriented bid and ask display regions. Such a combination has no basis in the application as filed.

The Proprietor has not replied to the first objection and submits with respect to the second objection that a skilled person can carry out the combination of granted claims 1, 8, 13 and 28.

The Opposition Division agrees with Opponent II with respect to both objections. The first objection is convincing and has not been replied by the Proprietor. As regards the second objection, the feature resulting from the combination of granted claims 1, 8, 13 and 28 does not make sense and the Proprietor has not indicated a basis for it in the application as filed.

## 7 **Summary**

The preliminary opinion of the Opposition Division is that the ground of opposition under Article 100(c) EPC 1973 prejudices maintenance of the patent as granted because independent claims 1, 29 and 53 and (at least) dependent claims 3, 8, 13-15, 22, 23, 25, 28, 44, 47, 50, 51 contain subject-matter extending beyond the content of the application as filed.

## **Article 100(b) EPC 1973 - Sufficiency of disclosure**

8 Opponent II opposes the patent on the ground that the subject-matters of claims 13 and 28 are not disclosed in the patent a manner sufficiently clear and complete for them to be carried out by a person skilled in the art (Article 100(b) EPC 1973). The reasons given therefor are essentially the same as those given for the objection raised under Article 100(c) EPC 1973 against these claims (see points 6.4 and 6.8 above). Claim 13 requires in one alternative a column of aligned cells in horizontally oriented bid and ask display regions. Claim 28 requires in one alternative to move an indicator relative to a field of static prices which is displayed in a column, i.e. vertically, whereby the indicators are displayed in horizontally oriented bid and ask display regions. These two specifications cannot be enabled by a skilled person as each of them is inherently contradictory.

The Proprietor contests this finding and notes that one could for example rotate the display in figures 3 and 4 by 90 degrees, a column of numbers being still a column of numbers even if rotated through 90 degrees.



The Opposition Division tends to consider that the contradictory requirements arising when considering the additional feature of claim 13 (or claim 28) with those of the claims on which claim 13 (claim 28) depends in one alternative is rather a matter of lack of clarity of the wording of the claims (Article 84 EPC 1973) than of insufficient disclosure (Article 83 EPC 1973).

However, given that these contradictions in claims 13 and 28 were not present in the application as filed but resulted from amendments made to the claims during the examination procedure, they may be the subject of a valid objection under Article 100(c) EPC 1973, as raised by Opponent II and addressed at points 6.4 and 6.8 above.

### **Article 100(a) EPC 1973 - Exclusion from patentability**

9 Opponents I, III, IV and V oppose the patent on the ground that the subject-matters of claims 1 to 53 are excluded from patentability under Article 52(2) and (3) EPC 1973 (Article 100(a) EPC 1973). Reference is made in particular to the exclusion of presentations of information, methods for doing business and programs for computers (Article 52(2)(c) and (d) EPC 1973). It is submitted that the claimed subject-matters do not solve any technical problem and that the mere recitation of device features is not sufficient to overcome the exclusion.

The Proprietor submits that the invention is not excluded from patentability as it is a technical tool providing a technical solution to the technical problem of *"ensuring not only that the speed of order entry can be improved but that this increase in speed is not achieved at the expense of accuracy"*.

The Opposition Division considers that the subject-matters of claims 1 to 53 have technical character and are therefore not excluded from patentability under Article 52(2) and (3) EPC. The ground of opposition under Article 100(a) EPC 1973 in combination with Article 52(2) and (3) EPC is therefore not allowable.

9.1 According to established case law (T 154/04, point 5), Article 52(2) EPC does not exclude from patentability any subject-matter or activity having technical character, even if it is related to the items listed in this provision since these items are only excluded "as such" (Article 52(3) EPC).

9.2 *Device claims 1 to 28*

Independent claim 1 is directed to a client device, such as a computer, comprising *inter alia* means for displaying information. By being directed to an apparatus for carrying out an activity, the subject-matter of independent claim

1 has technical character and is not excluded from patentability under Article 52(2) and (3) EPC following established case law (T 258/03, points 3.8 and 4.5, and G 3/08, point 10.13). The same considerations apply to dependent claims 2 to 28.

Opponent I has referred to Guidelines C-IV, 2.3.7 as implying that an apparatus for presenting information may well be excluded from patentability under Article 52(2) and (3) EPC. The Opposition Division notes that this passage of the Guidelines states that processes and apparatus for presenting information defined solely by the content of information are "not patentable". It is not clear whether "not patentable" means here that they are excluded from patentability under Article 52(2) and (3) EPC or that they fail to no meet all the requirements of Article 52(1) EPC, including inventive step. The Opposition Division considers that if the former reading of this passage is the one which was intended by the drafters of the Guidelines then it is not (anymore) representative of the established case law. See also T 258/03, point 3.9.

### 9.3 *Method claims 29 to 52*

Independent claim 29 is directed to a method of operating a client device. By being directed to a method using technical means, the subject-matter of independent claim 29 has technical character and is not excluded from patentability under Article 52(2) and (3) EPC (T 258/03, headnote I, and G 3/08, point 10.13). The same considerations apply to dependent claims 30 to 52.

Opponent V reads point 4.5 of T 258/03 as meaning that the use of technical means in a claimed method "may" but does not necessarily confer technical character. The Opposition Division disagrees: see the clear statement in headnote I of T 258/03.

### 9.4 *Computer program product claim 53*

Independent claim 53 is directed to *"a computer program product having program code recorded thereon for execution on a computer for receiving commands relating to a commodity to be traded on an electronic exchange, adapted for execution of all the steps of any one of claims 29 to 52"*.

The Opposition Division considers that the wording "a computer program product having program code *recorded thereon for execution on a computer*" implies that the claimed computer program product is or at least involves a computer-readable storage medium on which the program code is recorded (as opposed to the claim being directed to a disembodied computer program). Since the subject-matter of independent claim 53 is considered to involve the



use of a computer-readable storage medium, it is not excluded from patentability under Article 52(2) and (3) EPC following established case law (T 423/03, catchword 2, and G 3/08, point 10.13).

#### 9.5 *Aspects of the invention contributing to its technical character*

While the reasons given above are sufficient to show that none of the claims is directed to subject-matter excluded under Article 52(2) and (3) EPC, it is noted that non-technical features, to the extent that they do not interact with the technical subject-matter of the claim for solving a technical problem, i.e. non-technical features "as such", do not provide a technical contribution to the prior art and are thus ignored in assessing novelty and inventive step (T 154/04, point 5).

The question may therefore arise in the context of the assessment of novelty and inventive step of whether the claimed invention comprises features and aspects that contributes to its technical character in addition to the basic technical features of the involved commonplace computer and/or computer-readable storage medium. The preliminary view of the Opposition Division on this issue of general relevance is presented here.

Opponents I, III, IV and V suggest that there are no such features, the method implemented by the invention relying exclusively on considerations related to presentations of information and business methods. It is also argued that any effect achieved by the static display of prices and dynamic display of bids and asks according to the invention is directed solely to the human user's mind and the alleged improved speed and accuracy of order entry are entirely dependent on the user's mental and manual reactions to the conveyed information. These effects do therefore not qualify as technical effects.

The Proprietor submits that the *"combination of a static field of prices juxtaposed with first and second indicators that represent the market and an order entry region, which is configured such that selection of an area sends an order message to the electronic exchange based on a set trade order parameter and the price level that is aligned with the selected area"* in the claimed invention contributes to its technical character because it contributes to the solution of the technical problem of *"ensuring not only that the speed of order entry can be improved but that this increase is speed in not achieved at the expense of accuracy"*.

The Opposition Division notes first that the assessment of whether or not some features of a graphical user interface relating to presentation of information contribute to a solution to a technical problem and are therefore relevant to novelty and inventive step is in general a difficult issue and the

recent case law from the Boards of Appeal on this issue is not entirely consistent. In particular, the liberal view expressed in decision T 49/04, cited by the Proprietor, is explicitly rejected in decision T 1143/06 (see point 5).

The Opposition Division intends to follow the main line of case law on this issue which has been developed in particular by Board of Appeal 3.5.01 over the last ten years, of which decisions T 1143/06, T 756/06, T 1188/04, T 928/03, T 1043/03, T 125/04 and T 643/00 are representative. It is not intended to follow decision T 49/04 in view of decision T 1143/06.

The Opposition Division considers first that the combination of the means for setting a trade order parameter, the display of a field of static prices and the whole order entry region feature constitutes a graphical order input mechanism enabling the user to submit an order message with desired parameters to an electronic exchange in a fast and accurate manner (fast: order parameters can be preset, selection of an area is then sufficient to submit the order at the desired moment, no need to spend time entering order parameters at this moment; accurate: the order price is determined by the price level that is aligned with the selected area and the user can be sure that the desired price will be submitted as the price levels are static). Graphical user interface features facilitating and accelerating data entry, as opposed to features related to mere data output, are in general considered technical features (see e.g. T 1043/03, point 2, T 1188/04, points 3 and 5, and T 125/04, point 4.7). The Opposition Division is therefore of the opinion that at least this combination of features contributes to the technical character of the invention.

It is however less clear whether the features relating to the dynamic display of indicators (bid/ask quantities) at areas aligned with the price levels corresponding to the current internal market (and optionally market depth) contribute also to the technical character of the invention.

The primary function of these features is to convey information (internal market and optionally market depth) to the user to enable him to take trading decisions. The Proprietor suggests that this presentation of the information is more intuitive and contributes therefore to a better and faster decision making. This effect is also mentioned in the patent (paragraphs [0025], [0028] and [0029]). However, effects affecting only the mental decision making of a human user are normally not considered technical effects (see e.g. T 125/04, points 4.5 and 4.6 and T 1143/06, point 3). The Opposition Division is therefore of the opinion that this effect does not qualify as technical effect.



A potentially technical effect of these features may at best be seen in the following. It seems that the prices at which a user may want to enter orders will normally be close to the current internal market. By displaying the internal market indicators (internal market bid/ask quantities) aligned to the corresponding price levels, they are also displayed aligned to the areas to be selected to send an order at internal market prices. This appears to facilitate the "catching" of a price close to the internal market and thus to further accelerate the entry of the kind of orders which a user may normally want to submit (orders close to the internal market), which could qualify as a technical effect. The fact that this is enabled in the context of a sustained man-machine interaction (trading on an electronic exchange) seems to further support its technical character (see e.g. T 928/03, point 4.1.1). It is not clear whether the considerations at point 3.8 in T 1143/06, which come close to the submissions of Opponent III, are applicable with the same effect to an invention operating in the context of a sustained man-machine interaction. The Opposition Division emphasises that the insight that a trader will want to submit orders close to the internal market and that this should be taken into account in the design of the graphical user interface is not considered a technical consideration. The fact that data entry, not decision making, is further accelerated by the combined dynamic display of internal market and order entry areas, i.e. the implementation of that non-technical consideration, may however be considered to contribute to the technical character of the invention.

In summary, the Opposition Division considers that the combination of the means for setting a trade order parameter, the display of a field of static prices and the whole order entry region feature contributes to the technical character of the invention. It is however at present not clear whether the features relating to the dynamic display of the internal market and, optionally, of the market depth do also contribute to the technical character of the invention.

In cases like the present one where a proper separation of technical and non-technical features is difficult, a useful approach is to assess inventive step starting from a prior art coming as close as possible to the claimed subject-matter so as to limit to the remaining differentiating features the task of judging which of them make a technical contribution (see T 756/06, point 5). The Opposition Division intends to follow this approach.

## Priority claims

- 10 The patent claims rights of priority from P1 filed on 2 March 2000 and P2 filed on 9 June 2000.

Opponents I and V contest the validity of both priority claims for all claims of the patent.

As regards P1, it is submitted that the granted claims represent impermissible generalisations of subject-matter disclosed in P1. It is first noted that P1 is a US provisional application for patent which does not comprise any claim. The "Innovation 11" described in P1 is assumed to be that related to the invention claimed in the patent. Given the lack of a general statement of invention in P1, the skilled person would assume that all features disclosed in P1 in the context of "Innovation 11", like display of colour, current order status, time of day, market volume, etc. are essential features of that "innovation". It is also emphasised that display of market depth and "one click" trading facility are presented in P1 as essential features of the proposed systems. The granted claims do not comprise all these features and extends therefore beyond the content of P1. Furthermore, the granted claims use terms like "single action", "first indicator", "second indicator", "middle mouse button on a three button mouse", "means", "parameter", "area" and "region" whose meaning is broader than that of the terms used in P1 ("bids", "asks", values", "columns", "cells", "prices", etc.). This is not permissible in view of the requirements of Article 88 (4) EPC 1973.

As regards P2, it is noted that its disclosure is substantially identical to that of the application as filed and that the granted patent extends therefore beyond the content of P2 in the same manner as it extends beyond the content of the application as filed.

The Proprietor submits that both priority claims are valid for all granted claims and states that *"a comparison of the disclosure of the Patent with these priority documents shows that these documents as a whole specifically disclose all elements of the invention as claimed"*. No specific passages of P1 and P2 are cited.

The Opposition Division considers that at least the independent claims as granted are not entitled to priority from P1.

It is first noted that P1 does not include any claim or general statement of the invention coming close to the wording of independent claim 1 (or to that of any other granted claim) which would provide a prima facie basis for it. The Proprietor has also not cited any specific passage of P1 in reply to the objections of Opponents I and V.



It appears to the Opposition Division that a potential basis in P1 for the granted claims is the description at pages 23 to 35 of the graphical user interface *X\_TRADER Mercury*, including the description of "innovations" 11 to 19. As noted by the Opponents, this description of a graphical user interface is much more specific than the invention as defined in the granted claims. This issue has not been addressed by the Proprietor in PA1. It is therefore not apparent to the Opposition Division that the numerous generalisations over the specific disclosure of P1 defined by the granted claims can be considered to be directly and unambiguously derivable from P1, using common general knowledge, as required by Article 87(1) EPC 1973 in view of G 2/98 (headnote).

To take a single example of an apparently impermissible generalisation, the Opposition Division notes with Opponent V that P1 appears to mention consistently that triggering the sending of an order message with the Mercury display is performed by means of a single click of a computer mouse. See P1: section I.A, lines 1 to 3, section I.D, lines 2 to 5, and section "Innovation #15" on page 30. At least the independent claims as granted are not limited to this specific kind of user action for triggering the sending of an order message, not even to a "single action of the user input means" as in granted dependent claim 30. It appears that even a limitation to a "single action of the user input means" (understood as meaning "any action by a user within a short period of time, whether comprising one or more clicks of a mouse button or other input device" according to paragraph [0018] of the patent) would go beyond the disclosure of P1 in that it covers, for example, a double-click of a computer mouse or pressing a key of a computer keyboard instead of a single click of a computer mouse. P1 does not appear to contain a statement similar to paragraph [0018] of the patent. The Opposition Division tends therefore to consider that the order entry feature in the independent claims represents an impermissible generalisation over the disclosure of P1.

As regards P2, it appears to the Opposition Division that its content is the same as that of the application as filed (as noted by Opponent I) and that the claim to priority from P2 is therefore valid if and only if the claims comply with the requirements of Article 123(2) EPC with respect to the application as filed.

It appears therefore that if the objection under Article 100(c) EPC 1973 can be overcome the claims would be entitled to the priority of P2 (9 June 2000) but not necessarily to that of P1 (2 March 2000).

Finally, it is noted that at present the validity of the claim to priority from P1 does not appear to be critical to the assessment of novelty and inventive step given the submitted (alleged) prior art.

## State of the art

11 The Proprietor contests that several of the documents and alleged prior public uses cited by the Opponents in the notices of opposition belong to the state of the art pursuant to Article 54(2) EPC 1973. This is addressed in the following.

### 11.1 Tokyo Stock Exchange related documents D6 to D10 and prior use

#### *Document D6*

Opponents I, II and V cite document D6 as prior art. D6 is a manual describing the operation of a trading system for the Tokyo Stock Exchange (TSE).

D6 is in Japanese, D6a, D6b and D6c are English translations of selected pages of D6 provided by the Opponents. It is noted that D6b and D6c represent different translations of the same pages of D6; the translations appear however to be fairly consistent. The Opposition Division will rely primarily on D6b (in addition to D6a) as the copy quality of the figures in D6b is better than in D6c.

As regards the publication date of manual D6, Opponent V states in OP5 that D6 was made available to the public in August 1998 when it was distributed by the TSE to around 200 companies. These companies were all the participants able to conduct futures and options trades on the TSE. D6 was made available without any restrictions on the use to which the document could be put. Opponent V does not provide any evidence for these alleged facts in OP5 but indicates that further evidence will be provided in due course. Opponent I indicates August 1998 as date for D6 and states that the system described in D6 was used by the TSE starting in August 1998. D10 is cited as evidence for this last fact. It is stated that further evidence will be provided. Opponent II mentions August 1998 as date for D6 without further details.

The Proprietor contests that D6 belongs to the state of the art pursuant to Article 54(2) EPC 1973 and submits that it is up to the Opponents to provide a proof. In the absence of such proof, D6 should not be admitted. D10 is considered to be insufficient in this respect.



The Opposition Division notes that D6 bears the indications "August 1998" on page "Table of Contents - 4" and "As of August 1998" on page "Appendix 4-1" (see D6b). While this suggests that document D6 has been drafted in August 1998, it does not prove that D6 was made available to the public in August 1998 as alleged by the Opponents.

Opponent I appears to rely on D10 in this respect, which is a transcript of the deposition of Mr. Kawashima on 21 November 2005 in proceedings before the US District Court for the Northern District of Illinois. D10 is quite long and the only passage of D10 cited by Opponent I in respect of the issue of publication date is page 10. This passage concerns "Defendant's Exhibit 179" and it is not clear to the Opposition Division what this document is and how it relates to D6. Furthermore the cited passage addresses the date of preparation of that document, not its date of publication.

Hence, at present, it is not proven that D6 belongs to the prior art pursuant to Article 54(2) EPC 1973. The Opponents bear the burden of proof for the alleged fact that D6 was made available to the public in August 1998.

*Prior public use of the system described in D6*

Opponents I and V refer also to a prior public use in August 1998 of the system described in D6. The Proprietor submits that it has not been proven that this alleged prior public use belongs to the state of the art.

The Opposition Division considers that the same considerations as for D6 apply to that alleged prior public use. Additionally, it is not clear whether the Opponents intend to rely on some features of this alleged prior public use that would not be described in D6 (but discussed e.g. in D10) and, if so, which are these features.

*Document D7*

Opponents I and II submitted document D7 but only Opponent II specifically refers to it in its argumentation and gives September 1997 as publication date. This is contested by the Proprietor.

The Opposition Division notes that D7 bears a date "September 1997" on its title page and that it appears to be a document which was intended for distribution to the participants of the new Future Options Trading System. It appears to disclose a system similar to that disclosed in D6 but to a lesser degree of detail. The burden of proof is on the Opponents to prove that this document was made available to the public before the relevant date.

### *Documents D8 and D9*

Opponent I submitted documents D8/D8a and D9/D9a/D9b with its notice of opposition but commented only on D9 ("*On April 18, 2005, the Tokyo Stock Exchange filed an opposition to the grant of TTI's application for a highly similar patent before the Japanese Patent Office*"). The Proprietor did not comment on these documents.

The Opposition Division notes that D8 bears the indication "Issuing Date: July 31, 2000" on its last page (see English translation D8a) and that D9 is a notice of opposition filed by Tokyo Stock Exchange at the Japanese Patent Office on 18 April 2005 (see English translations D9a and D9b). Both dates are after the second claimed priority date. The Opposition Division does not consider these documents further as their specific relevance has neither been explained by Opponent I nor it is prima facie evident to the Opposition Division.

## 11.2 **GL Trade related documents D25 to D27 and prior use**

### *Document D25*

Opponents I and V cite document D25 as prior art (D25' is a collection of pages of D25). D25 is a software manual titled "GL LIFFE CONNECT for FUTURES User Guide V4.51" by GL Trade. Opponent I states that GL Trade published D25 in June 1999 or earlier and that evidences supporting this allegation including sworn testimony will be provided. Opponent V states that D25 was made available by distribution to those GL customers who used the GL system for trading on LIFFE and that D25 is dated June 1999. It is also submitted that the system described in D25 was operational prior to 2 March 2000 and that further evidence pertaining to the GL Trade system will be provided in due course.

The Proprietor contests that D25 belongs to the prior art.

The Opposition Division notes that D25 bears date "June 1999" but that does not yet prove that D25 was made available to the public on that date. The burden of proof is on the Opponents to show that D25 was made available to the public before the relevant date. It is noted that GL Trade is one of the common opponent of Opponent I which should therefore be in a good position to provide a complete proof for any alleged fact in relation to GL Trade prior art.



*Prior public use of the system described in D25*

The same considerations apply to the alleged prior public use of the system described in D25. Additionally, it is not clear whether the Opponents intend to rely on some features of this alleged prior public use that would not be described in D25 and, if so, which are these features.

*Documents D26 and D27*

Opponent II cites documents D26 and D27 as GL Trade's software Trade Pad related documents published respectively in 1999 and July 1999.

The Proprietor contests this and notes that neither D26 nor D27 bears a date.

The Opposition Division notes that D26 does not bear any date and that the function of D26 is also not clear: advertisement brochure or user manual intended to be supplied with a software product? D27 appears to be a selection of pages of a software manual and bears a handwritten date "Juillet 1999" on page 7 but this has no probative value. It is also noted that the very limited selection of pages of the user manual provided by Opponent II (in particular: no copy of title page and of other pages typically bearing bibliographical information) makes a proper evaluation of this document very difficult. Furthermore the copy quality of the figures in both D26 and D27 is very bad; this further impedes their evaluation. The burden of proof is on the Opponents to show that D26 and D27 were made available to the public before the relevant date.

11.3 **Documents D30/D30' (ORC user manual)**

Opponent IV cites document D30' which is a collection of pages of a software user manual titled "ORC - Instructions for Use - Version 2.2.8" and states that this manual was published in 1999.

The Proprietor argues that it is not proved that this manual was published in 1999 and considers that the limited selection of pages provided by Opponent IV impedes a proper evaluation of the manual.

The Opposition Division notes first that a complete version of the manual (D30) was submitted by Opponent IV in addition to D30' together with the notice of opposition and that this was indicated on Form 2300.4 of OP4 ("complete document of ORC TM, Instructions for Use, Version 2.2.8"). The Proprietor can retrieve the complete version D30 via the online file inspection (entry dated 2006-01-13 with 389 pages), if it does still not have it. The Opposition Division will in general refer to D30 only.

It is noted that D30 bears the indication "copyright 1999" on the title page which does however not yet mean that it was made available to the public in 1999.

Hence, at present, it is not proven that D30 belongs to the prior art pursuant to Article 54(1) and (2) EPC 1973. The Opponents bear the burden of proof for the alleged fact that D30 was made available to the public in 1999.

#### 11.4 **TIFFE prior use and related document D28**

Opponent III submits document D28 which is a print-out dated 10 January 2006 of a web page retrieved from the Internet Archive. It is argued that this web page, archived on 29 June 1998 by the Internet Archive, discloses a trading terminal system which was operative at the Tokyo International Financial Futures Exchange (TIFFE) in April 1996. Opponent III relies mainly on features of the screen shot shown on this web page and indicates that this image was also separately archived by the Internet Archive on 12 November 1997. After argumentation as to why the TIFFE system discloses of the features of the independent claims, Opponent III indicates "*Als Zeuge hierzu wird der oben stehend angeführte Herr Kenichiro Ohara benannt*". The personal data of the nominated witness are provided.

The Proprietor states that the screen shot on D28 is unclear and the information under the link provided on the Internet is also unclear. The Proprietor assumes that Mr. Ohara is nominated as witness to testify how the TIFFE system worked in 1997 and requests that the substance of Mr. Ohara's testimony is made available so that the Proprietor has sufficient time to examine this testimony.

The Opposition Division considers that the content of D28, including the screen shot shown on it, constitutes prior art pursuant to Article 54 (2) EPC 1973. While this has not been contested by the Proprietor, the Opposition Division has made some investigation on its own motion (Article 114(1) EPC 1973) to verify the prior art status of the content of D28 given that the link printed on D28 does not work (as noted by the Proprietor) and does also not correspond to the usual syntax of pages of the Internet Archive (the portion of the URL following the date/time string reads normally `//http://www`, not `/http://www`). A slightly different URL for D28 is however indicated in OP3  
`http://web.archive.org/web/19980629135037//http://www.tif  
fe.or.jp/e_html/new_on.html`



and the Opposition Division could retrieve exactly the same information as D28 under this URL on 8 September 2010. It can be derived from this URL that the archived page was retrieved on 29 June 1998 by the Internet Archive. However, as usual with archive dates indicated by the Internet Archive, this date applies only to the retrieved HTML code, not to any elements, like images, embedded in it. In the present case, the screen shot is such an embedded element, as can be seen from the source code of the archived page which includes the following line of code:

```
<IMG SRC="../../../e_img/moniter.gif" ALT="">
```

The screen shot shown in D28 can be found on the Internet Archive under the second link indicated in OP3

```
http://web.archive.org/web/19971112145951/www.tiffe.or.jp  
/e_img/moniter.gif
```

as could be verified by the Opposition Division on 8 September 2010. This link corresponds to the address of the image file referred to in the above line of HTML code. The screen shot was archived on 12 November 1997, as can be derived from the link. The Opposition Division is therefore satisfied that the content of D28 was made available to the public in 1998.

The Opposition Division agrees however with the Proprietor that it is not clear from OP3 for which concrete facts Mr. Ohara is offered as witness evidence.

Opponent III attempts in OP3 to infer from D28 that the TIFFE system referred to therein had all the features of the independent claims, rather than to clearly indicate how the TIFFE system worked and to offer witness evidence for the fact that it worked as stated. It is thus not clear which concrete facts are referred to by "hierzu" in the statement "*Als Zeuge hierzu wird ...*".

#### 11.5 **Prior use of the invention by Mr. Brumfield**

Opponents I and V submit that one of the inventors, Mr. Harris Brumfield, used the invention before 2 March 2000 and that this use constitutes a prior public use. It is considered to have been established in US proceedings concerning the US counterparts of the present patent (reference is made to D36) that Mr. Brumfield entered into agreement with the Proprietor, Trading Technologies International, for the development of a software program and that a computer with related software was installed in Brumfield's office in January 1999 and February 1999. Furthermore Mr. Brumfield said to have "made a killing" on trading with the use of the computer incorporating the

graphical user interface to which the patent is directed for over a year prior to 28 August 2000, apparently in July and August 1999. Reference is made hereby to article D37 dated 28 August 2000.

Further relevant evidences relating to this prior use have been submitted during the US proceedings but they have been designated confidential under a Protective Order which was entered by the Court on 29 September 2004. The Opponents were therefore not in a position, at the time OP1 and OP5 were filed, to submit further facts and evidences relating to this prior use.

However, considering that the Judge in the US proceedings has established that it is undisputed that Mr. Brumfield used the Mercury display of the invention before 2 March 2000, the standard of proof for prior public use, balance of probabilities (reference is made to T 270/90), is met by the Judge's finding. The burden of proof moves therefore to the Proprietor to bring evidence on the contrary, following T 743/89. It is also suggested that the Opposition Division requests the Proprietor to provide all the relevant information concerning this prior use under Article 117(3) EPC 1973 and Rule 72(1) EPC 1973.

The Proprietor notes that Opponents I and V are parties to the US proceedings and know that Mr. Brumfield's use of a prototype of the invention was confidential. There is furthermore no legal basis for switching the burden of proof to the Proprietor where the Opponents are incapable of bringing the necessary proof.

The Opposition Division considers that there is nothing in the evidence provided by Opponents I and V that suggests that Mr. Brumfield made the claimed invention available to the public, in the sense of Article 54(2) EPC 1973. The "undisputed facts" mentioned in the Memorandum Opinion and Order of Senior Judge J.B. Moran (D36) concern software development contracts between Mr. Brumfield and Trading Technologies International, activities which are normally of a confidential nature. Even if Mr. Brumfield traded with a software embodying the claimed invention before 2 March 2000, as alleged by the Opponents on the basis of Mr. Brumfield statement quoted in D37, this does by no means suggest that the features of the claimed invention were made available to the public as trading does not require to use the graphical user interface in a public place. There is thus nothing to put in question the Proprietor's assertion that any use of a prototype of the claimed invention by Mr. Brumfield before 2 March 2000 was confidential. The Opposition Division notes also the conclusion of Judge J.B. Moran on page 7 of D36: "*The people involved in the development were not eccentric inventors*



*unschooled in patent law [...] They were sensitive to the one year bar rule, and it is highly unlikely that they would have taken risks with the filing date. We are not persuaded that there is a substantial or even some likelihood that the invention was commercially exploited before March 2, 1999".*

On the basis of the available evidence, the assertion of Opponents I and V that a prior *public* use took place in this respect appear to be mere speculations. It is also unclear what exactly is alleged to have been disclosed (which concrete features of the claimed invention) as well as to whom and under which circumstances this is considered to have been disclosed so as to qualify as having been made available to the public in the sense of Article 54 (2) EPC 1973. The Opposition Division agrees with the Proprietor that in the present case the burden of proof that a prior public use took place rests with the Opponents. Furthermore, mere speculation on an alleged prior public use is not considered a sufficient reason for the Opposition Division to engage in taking evidence on its own motion on the basis of Article 114(1) EPC 1973, Article 117 EPC and Rule 117 EPC (Rule 72(1) EPC 1973).

12 **LIFFE related documents D11 to D24 and prior uses**

Opponent I cites several documents (D11 to D24) in relation to alleged prior art relating to the London International Financial Futures Exchange (LIFFE).

*Documents D11 to D15 (LIFFE CONNECT Manuals)*

Documents D11 to D15 are various versions of "*The Application Program Interface (API) Reference Manual - For LIFFE CONNECT*" bearing release numbers ranging from 2.7 to 3.3 and dates from September 1998 to January 1999. The Proprietor has not challenged that these documents represent prior art. The Opposition Division accepts therefore prima facie that D11 to D15 belong to the prior art pursuant to Article 54(2) EPC 1973.

*Documents D16 to D18 (LIFFE Directory of Software Solutions)*

Documents D16 to D18 are various issues of the "*Directory of Software Solutions - For LIFFE CONNECT*" numbered 1 to 3 and bearing dates from October 1998 to June 1999. The Proprietor has not challenged that these documents represent prior art. The Opposition Division accepts therefore prima facie that D16 to D18 belong to the prior art pursuant to Article 54(2) EPC 1973.

*Document D19 (LIFFE presentation slides)*

Document D19 is a collection of presentation slides. Opponent I indicates on Form 2300.4 of OP1 that these are the slides of a presentation held on 24 September 1998 at the ISV Developers Conference. The Proprietor has not

challenged that D19 represents prior art. However, as D19 does not even bear a date or an indication of the conference at which the presentation is alleged to have taken place, the Opposition Division cannot accept that D19 belongs to the prior art pursuant to Article 54(2) EPC 1973 without further evidence.

*Document D20 (IRIS)*

Document D20 is presented as "technical and marketing material relating to the IRIS software" by Opponent I on Form 2300.4 of OP1. D20 does not bear any date. The Proprietor has not challenged that D20 belongs to the prior art. The Opposition Division notes that D20 appears to be reproduced at pages 14/15 of D18, which bears the indication "Issue 3 - June 1999", as noted above. The Opposition Division accepts therefore prima facie that D20 belongs to the prior art pursuant to Article 54(2) EPC 1973.

*Prior public use of the IRIS system*

Opponent I states: *"Full details of the IRIS system and attendant manuals will be provided. Evidence supporting these allegations will include the publications and sworn testimony regarding the manuals and the attendant system."*

The Opposition Division notes that even if the marketing brochure D20 was made available to the public in 1999, this does not imply that the IRIS system described therein was also made available to the public by prior use. It is also not clear on which features of the alleged prior public use Opponent I intends to rely in addition to those already disclosed in D20.

*Document D21 (Deposition by Mr. MacGregor)*

Document D21 is the transcript of the deposition by Mr. Paul MacGregor on 1 November 2005 in proceedings before the US District Court for the Northern District of Illinois. Mr. MacGregor worked at LIFFE as head of Marketing for the Third Party Independent Software Vendor (ISV) Program in 1998 and as head of Third Party Sales in 1999. The Opposition Division agrees with the Proprietor that D21 does not belong to the prior art pursuant to Article 54(2) EPC 1973 but D21 may nevertheless be used as evidence for proving facts. It is however not clear how the various "Exhibits" referred to in D21 relate to the documents submitted by Opponent I. It is also noted that some passages of the deposition (at pages 112, 124, 128, 132) have been stroke-out such that they are not readable. It is not clear who stroke-out this passages and why this has been done.



*Documents D22 to D24 (APT)*

Document D22 is a document on Automated Pit Trading (APT) Trading Procedures by LIFFE bearing the indication "Issue date: 28th March 1991 - Effective: 3rd April 1991". Document D23 is an APT User Guide bearing the date "January 1994". Document D24 is a document on the ATP<sup>plus</sup> Trading Procedures bearing the indication "Attachment to General Notice No. 788 - Issued on 28 December 1995". The Proprietor has not challenged that D22 to D24 belong to the prior art. The Opposition Division accepts therefore prima facie that D22 to D24 belong to the prior art pursuant to Article 54(2) EPC 1973.

*Prior public uses of the APT system*

Opponent I refers to prior public uses of a "pre-1994 version" and of a "post-1994 version" of the APT system. The presentation of the features of these alleged prior public uses in OP1 is very short, Opponent I refers mainly to passages of D21. However, as noted above, D21 refers to various "Exhibits" whose relationship to the documents submitted with OP1, in particular D22 to D24, is not clear. It is in particular not clear what the "Exhibit 149" and "Exhibit 150" referred to at pages 23 and 28 of D21 are. The Opposition Division considers therefore that at least the concrete features of the alleged prior public uses of the APT system are not clear.

13 **Remarks on further documents submitted with OP1 to OP5**

*Documents D2 and D3*

It is noted that D2 to D3 are prior art documents that were considered by the Examining Division. They have been indicated by Opponent I in OP1 on Form 2300.3 but do not appear to be specifically referred to in any line of argumentation. It appears that the reference to "D2" in OP1 at point 72 ("any two of D1, D2, TSE Exhibit 1 and LIFFE Exhibits 5 to 8") was meant as a reference to "D4", in view of the context. Furthermore, having regard to the passages of D2 and D3 indicated by Opponent I on Form 2300.3, it is not apparent to the Opposition Division that D2 and D3 may be any significance to the outcome of the present opposition proceedings.

*Document D29 (OM CLICK)*

Opponent I cites document D29 which is a software manual bearing date "October 1998" and various software version numbers. The Proprietor has not challenged that D29 belongs to the prior art. The Opposition Division accepts therefore prima facie that D29 belongs to the prior art pursuant to Article 54(2) EPC 1973.

*Document D32 (Trading Technologies brochure)*

Opponent II cites document D32 which is a brochure by Trading Technologies relating to its "X\_TRADER" product. Opponent II gives 1999 as publication date for D32 but D32 itself does not bear any date. However, given that it is a brochure from the Proprietor and that the Proprietor has not contested that D32 belongs to the prior art, the Opposition Division accepts prima facie that D32 belongs to the prior art pursuant to Article 54(2) EPC 1973.

*Documents D31 and D33*

D31 and D33 appear to be online business journal articles. They bear dates "4 December 1998" and "25 February 1999", respectively. The Proprietor has not challenged that D31 and D33 belong to the prior art. The Opposition Division accepts therefore prima facie that D31 and D33 belongs to the prior art pursuant to Article 54(2) EPC 1973.

*Document D34 (MINEX)*

Opponent II cites document D34 which is a user manual for the MINEX system. D34 bears the indication "September 1992" on its title page and "November, 1992" on the other pages. Opponent II gives November 1992 as publication date. The Proprietor has not challenged that D34 belongs to the prior art. The Opposition Division accepts therefore prima facie that D34 belongs to the prior art pursuant to Article 54(2) EPC 1973.

14 **Late filed documents relating to Wit Digital Stock Market**

Opponent I submitted with OP1-2 new facts and evidences regarding an alleged prior public use of a computer program called "Wit Digital Stock Market". Opponent I asserts in OP1-2 that this program was available in 1999 and anticipates claim 1 of the patent. No argumentation supporting this later finding is provided. D40, D41 and D42 are provided as evidences relating to this alleged prior public use but no specific passages are cited. Opponent I states *"We file this evidence now to give an opportunity for the Patent Office to assess its relevance to the claims. We will follow up these exhibits with evidence that substantiates the date which Wit Digital Stock Market was available to the public"*.

The Opposition Division notes that while OP1-2 is dated 26 September 2006 it was effectively received at the EPO on 10 October 2006, hence just after the Proprietor replied to the notices of opposition with PA1 (received at the EPO on 3 October 2006). This is in any case more than eight months after the time limit for filing notices of opposition expired (13 January 2006).



Opponent I did not mention the alleged prior public use "Wit Digital Stock Market" in OP1. The Opposition Division notes that D42 is a declaration of Mr. Buist relating to Wit Digital Stock Market in a case before the US District Court of the Northern District of Illinois involving Rosenthal Collins Group, a common opponent of Opponent I, and Trading Technologies International, the Proprietor. The declaration was made on 26 April 2006. While it is clear that D42 itself could not have been submitted before the time limit for filing notices of opposition, no reason is apparent why Opponent I could not have provided all the necessary indications regarding the alleged prior public use in OP1, as required by Rule 55(c) EPC 1973. Opponent I has also not justified the late filing. The Opposition Division considers therefore the submissions in OP1-2 that a prior public use of Wit Digital Stock Market took place in 1999 and that this alleged prior public use anticipates claim 1 of the patent to be late filed submissions.

Opponent I does not discuss any concrete features of the subject of the alleged prior public use and does not give any argumentation for the alleged lack of novelty of claim 1. Instead, Opponent I submits D40, D41 and D42 for details of Wit Digital Stock Market but does not cite any passages of these documents. The allegations of prior public use and of lack of novelty have therefore not been substantiated by Opponent I in OP1-2.

The tasks of determining the features of the alleged prior public use and of assessing their relevance to the issue of novelty are expressly left by Opponent I to the Opposition Division. This is in clear contradiction to the general principle that any party bears the burden of proof for the facts on which it intends to rely and that it is the responsibility of the opponent to present the facts, evidences and arguments in support of an advanced ground of opposition. This burden of proof cannot be dispensed with by requesting the Opposition Division to do the necessary investigations in place of the opponent, in particular in view of the essentially contentious character of opposition proceedings.

Furthermore, a brief review of D40 to D42 does not reveal that the submissions made with OP1-2 would be prima facie more relevant than the facts and evidences submitted with the notices of opposition.

D40 is a collection of 29 slides of a presentation which, according to Opponent I, has been "compiled in 1999". The circumstances of the presentation are not indicated such that no conclusions can be drawn as to its public character. The slides show mainly screen shots from which the Opposition Division cannot clearly derive the operation of the software.

D41 is a collection of five chapters of a book published in 1998. A reading of this long book excerpt did not reveal any passage of particular relevance to the outcome of the present proceedings.

D42 is a declaration by Mr. Walter D. Buist, a developer of the Wit Digital Stock Market computer program. While it discusses at points 46/47 a version of the computer program developed in November 1998 with features coming close to those of the invention, the Opposition Division cannot derive from the declaration of Mr. Walter D. Buist *all circumstances* (when, what, where, how, by whom) of a *concrete prior public use* which could be relevant to the outcome of the present proceedings.

The Opposition Division notes also that it appears that the validity of the declaration by Mr. Walter D. Buist has been put in question in the US proceedings. The parties may provide further information on this issue as well as on when the alleged prior public use Wit Digital Stock Market was first indicated by at least one of the common opponents of Opponent I in the US proceedings (before or after the date on which OP1 was filed?).

At present, taking all the above considerations into account, the Opposition Division intends not to allow the submissions made in OP1-2 relating to the alleged prior public use Wit Digital Stock Stock Market into the proceedings, in accordance with Article 114(2) EPC 1973.

- 15 As it is at present not clear which of cited documents and prior uses will finally be considered to belong to the state of the art pursuant to Article 54(2) EPC 1973, only brief remarks regarding novelty and inventive step are made in the following to give some guidance to the parties on the relevance of the alleged prior art.

### **Claim construction**

- 16 *Interpretation of the term "field of static prices" in claim 1*

Since the interpretation of the term "static" in the expression "field of static prices" as used in independent claim 1 is relevant to the issues of novelty and inventive step, this question will have to be dealt with as a preliminary.

From the submissions of the parties, it is apparent that they have different understandings of its meaning. For example, Opponent II argues in OP2 that the prices displayed in D4 and in D6 are static in the sense of claim 1 because they do not depend on the orders currently in the market. With respect to a



mode operation of the system shown in D6, Opponent II argues that the "prices are static up until [an automatic] re-centering event occurs". With respect to that same mode of operation, Opponent V argues in OP5 that *"for practical purposes, the price field in the Basic Board Screen is static, since generally re-compilation will only be necessary when the inside market exceeds the initial window"*.

In the context of the objection under Article 100(c) EPC 1973 raised by Opponent II against dependent claims 5 and 6, the Proprietor states in PA1 that in paragraph [0031] of the patent the term "re-centering command" is "kept broad to include manual and automatic re-centering". This is directly relevant to the interpretation of the term "static" in claim 1 given that paragraph [0031] addresses precisely the meaning to be given to this term.

The Opposition Division notes that the prima facie meaning of the term "static" in claim 1 would be that the displayed prices do not change at all on the display during operation of the claimed invention, neither in value nor in position on the screen. This prima facie interpretation would however be in clear contradiction with the dependent claims and the description which disclose embodiments of the claimed invention in which displayed prices change positions on the screen upon receipt of a re-centering command. The term "static" in the expression "field of static prices" as used in independent claim 1 requires thus an interpretation departing from its prima facie meaning to be consistent with the dependent claims and description. The Opposition Division considers that in such circumstance the description and drawings must be taken into account to interpret the term (Article 69(1) EPC).

As the patent as granted appears to extent beyond the content of the application as filed in several aspects (addressed above under Article 100(c) EPC 1973), the Opposition Division relies in the following on the application as filed to elucidate the meaning to be given to term "static" to avoid any bias due to added subject-matter contained the patent. It is prima facie assumed that the same interpretation of the term "static" would apply to the (amended) patent if it would fulfil the requirements of Article 123(2) and (3) EPC.

The critical passage of the description is page 13, lines 14 to 16:

*"The values in the price column are static; that is, they do not normally change positions unless a re-centering command is received (discussed in detail later)."*

It follows from this passage that "static" in "field of static prices" requires that both the displayed price values and their positions on the screen do not change. It is not sufficient that the displayed price values do not depend on the orders in the market, as suggested by Opponent II.

It follows also from this passage that "static" in "field of static prices" does not exclude any change of values and positions during operation: the price values may change positions on the screen when some specific events occur.

The Proprietor argues that the term "re-centering command" at page 13, lines 14 to 16, is kept broad to include manual and automatic re-centering. The Opposition Division notes that this would imply that "static" in "field of static prices" would not exclude that the price values change positions on the screen when an automatic re-centering event occurs.

At present, the Opposition Division has doubts as to whether the interpretation submitted by the Proprietor may be followed. It appears that when considering the application as filed as a whole, the term "re-centering command" as used therein is always referring to a manual re-centering command issued by the user, as opposed to an automatic re-centering command or event. The sentence at page 13, lines 14 to 16, refers to the passage at page 15, lines 7 to 15, for further details of the re-centering command and all the re-centering commands discussed in this passage are manual ones.

The skilled person reading the description would also consider that allowing automatic re-centering commands would be at odds with the core of the invention which is to increase the likelihood of entering orders at desired prices with desired quantities by making sure that the values in the price column and thus the price levels on the screen remain static when the user enters an order. This would not be guaranteed if automatic re-centering commands were allowed.

It is furthermore not apparent that original claim 6 would provide any additional technical information, over those provided by the description, that would lead the skilled person to consider that re-centering commands may be automatic ones. Original claim 6 specifies *"re-centering said prices corresponding to the bids and asks about an inside market price upon receipt of a re-centering instruction"* without mentioning that this instruction has to be issued by a user. However, original claim 6 contains also, by dependency on original claim 1, the feature of "statically displaying prices". There is thus a tension between these two features of original claim 6 and the skilled person



reading the application would rely on the description to resolve this tension and interpret original claim 6. For the reasons given above, the description suggests that re-centering commands may be manual but not automatic ones.

The Opposition Division tends therefore to interpret the term "static" in the expression "field of static prices" used in claim 1 as requiring that the displayed prices do not change on the display during operation of the claimed device, neither in value nor in position on the screen, unless the claimed device receives a command issued by the user to change the positions of the price values on the screen.

This interpretation appears sensible because it would be consistent with the description and dependent claims (it does not exclude the possibility that re-centering command may be issued by the user) without however including in claim 1 a limitation requiring that the claimed device must enable the issuance of re-centering commands by the user.

#### **Article 100(a) EPC 1973 - Novelty**

- 17 At present, it appears that none of the alleged *written* prior art is prejudicial to the novelty of the independent claims (Article 52(1) EPC and Article 54(1) and (2) EPC 1973). The Opposition Division discusses this issue on the basis of independent claim 1 and assumes that the conclusions obtained thereby are equally applicable to corresponding independent claims 29 and 53.

It is noted that in all the cases addressed below at least part of the differentiating features affect directly the order entry mechanism and establish thereby technical novelty, in view of the remarks made at point 9.5 above.

#### **17.1 Novelty over D6 and D7 (TSE)**

##### *Document D6*

Opponents I and V argue that claim 1 lacks novelty over D6. The analysis of D6 in relation to the features of independent claim 1 made by Opponent II in the context of its inventive step argumentation is also to be taken into consideration.

The Proprietor argues that the teaching of D6 is in general not clear and that the system disclosed therein lacks several features of the device of claim 1: there is neither a field of *static* prices nor a movement of first and second indicators relative such a field of static prices, and, in particular, there is no order entry region as claimed.

The Opposition Division considers first that the mode of operation of the system disclosed in D6 coming closest to the claimed invention is the one arising from the combined selection of the "uncompressed price display method" and the "scroll screen" (see D6b: section (11) bridging pages 7-21 and 7-22). The Opposition Division does not agree with Opponents II and V that the other modes involve a "field of static prices" given that the display of prices in these modes involves automatic movements of prices on the screen depending on certain events.

The Opposition Division considers that in this mode of operation a field of static prices is displayed in view of the statements *"Moreover, in the 'scroll screen' price display locations do not change automatically"* (D6b: page 7-25) and *"The board information is automatically refreshed even during scrolling operations"* (D6b: page 7-26). The Proprietor's interpretation of the second statement as relating to only the internal working of the program is not convincing. The skilled person would understand this passage to relate to what is displayed to the user, in particular given the immediate context of the passage. A movement of first and second indicators relative to a field of static prices is implicitly present in this mode of operation in view of the figure at page 7-17 (D6b) in combination with these statements.

The Opposition Division tends however to agree with the Proprietor that it is not entirely clear whether the method of placing orders by double-clicking on the areas of the board, as shown on page 9-5 (see D6b) works not only for the "basic board screen" but also for the "scroll screen" (the screen shown on page 9-5 appears to be a "basic board screen" as an "OVER" section is displayed, which would not be the case if it was a "scroll screen", as indicated on page 7-26). While it appears to be quite a natural idea to allow orders to be placed in this manner from both screens, this is not sufficient to meet the "clearly and unambiguously derivable" criterion for lack of novelty.

In any case, a difference exists in that in this method of placing orders a number of order parameters are automatically inputted (e.g. commodity name, which is preset, and price, which is based on the location of the selected area) but it still requires the user to enter the order quantity before the order message is sent. Opponents I and V suggestions of the contrary are not convincing. Hence, the order entry region feature of claim 1 is not entirely present in this mode of operation of D6.



### *Document D7*

This document on which Opponent II relies as an alternative to D6 discloses less details of the system of D6 and, in particular, does not appear to disclose the "scroll screen" mode of operation. D7 appears therefore to lack disclosure of the display of a field of static prices as in claim 1 in addition to the features already missing in D6.

## 17.2 **Novelty over D25 to D27 (GL Trade)**

### *Document D25*

Opponents I and V argue that claim 1 lacks novelty over D25.

The Proprietor argues that D25 does not disclose the feature of *"updating the display ... such that at least one of first and second indicators is moved relative to the field of static prices"* of claim 1.

The Opposition Division agrees with the Proprietor that it is not directly and unambiguously derivable from D25 that the price column in the figure shown on page 29 of D25 qualifies as a "field of static prices" in the sense of claim 1.

While it is clear that the display must be updated when new market data is received, it is not clear how this is done. In particular, it cannot be excluded that the internal market prices are always kept in the centre of the display or that automatic re-centering is performed when some conditions are fulfilled, e.g. when the internal market prices go beyond the displayed price range.

Opponent V points to the first paragraph on page 31: *"The 2IM will allow the display of 1 to 22 rows. Since the market depth of a given market could go beyond, a scrollable bar on the right hand side of the 2IM will allow the trader to scroll in the given instrument market depth."* This does however not imply that the prices will remain static if the internal market prices increase or decrease. Significantly, this passage presents the scrollbar as a solution enabling the user to scroll in the market depth. It is not suggested that the user may need it to follow the internal market, which would be quite an important use of the scrollbar if the prices were statically displayed and the internal market could go beyond the displayed price range.

Apart from that, the Opposition Division tends to agree with Opponent V that the double-click order entry disclosed D25 (page 32, last paragraph and page 20, section 3.3.4) covers the order entry region feature of claim 1 (apart from the "static" aspect of the "field of static prices" recited therein). D25 mentions explicitly that after a first click on an area the cursor is placed directly on the Send button of the opened window so as to enable the user to submit an order by performing a single double-click with a preset quantity and a price

determined on the basis of the selected area. This appears to disclose the feature of claim 1 that "selection of [the area] sends an order message" and even that this selection is realised by a "single action of the user".

*Documents D26 and D27*

Opponent II argues that claim 1 lacks novelty over D26 and D27.

The Proprietor contests this finding for the same reason as given for D25.

The Opposition Division considers that at least the same features of claim 1 are missing in D26 and D27 as in D25. Furthermore, the very bad copy quality of the figures in both D26 and D27 and the limited number of pages of D27 impedes a clear determination of the teaching of these documents.

### 17.3 **Novelty over D4/D5 (Guterman et al.)**

Opponent I argues that claim 1 lacks novelty over D4 and Opponents II and IV argue that it lacks novelty over D5. US patent D4 is a family member of PCT application D5. The disclosures of D4 and D5 appear to be essentially identical. The Opposition Division will therefore focus on D5 and read on D5 the submissions made in OP1 with respect to D4 (unless Opponent I points to significant differences between D4 and D5).

The Proprietor notes that the purpose of the system disclosed in D5 is to enable a trader working in an open outcry environment to manage the orders in his deck, not to enable him to submit electronic trade orders to an electronic exchange. D5 does not disclose receiving the current highest bid price and lowest ask price and displaying the internal market by first and second indicators as claimed, and it does also not disclose a mechanism for sending an order to an electronic exchange, and therefore also no mechanism for setting a trade order parameter for an order.

The Opposition Division notes with the Proprietor that D5 discloses a system for managing a broker's order deck which allows electronic receipt of orders from customers to be executed by the broker in an open outcry environment (page 13, lines 10 to 22) and electronic reporting of trade orders executed by the broker to customers and clearing house (page 29, lines 2 to 5). The system involves an "electronic order entry system and price reporting system" provided by the exchange (page 16, lines 1 to 5).

The Opposition Division agrees with the Proprietor that D5 does not disclose receiving "at least a current highest bid price and a lowest ask price available for said commodity", as in claim 1, as the client device in D5 appears to receive only the current trade price (last traded price) from the price reporting system. Accordingly, it does also not disclose a display of first and second



indicators as in claim 1. The order icons 139 shown in figure 2b and referred to by Opponents II and IV represent orders submitted to the broker by its customers, not orders currently in the market. The prices associated with the order icons do therefore not represent the current highest bid price and lowest ask price for the commodity.

It is however undisputed that a field of static prices is disclosed in D5 (figure 2b: column 136 of price ticks) and that the current trade price for the commodity is indicated by the display of a market bar at the price level corresponding to that price (page 26, lines 3/4: *"the market bar 137 moves up and down along column 136 in response to changes in the market prices"*).

The Opposition Division agrees with the Proprietor that the system in D5 does not allow submitting trade orders to the electronic exchange and that its purpose is therefore different. However, it is not clear whether the wording of claim 1 reflects sufficiently this difference. The system of D5 enables a message to be sent to the electronic order entry system provided by the exchange and this message concerns executed orders. It appears that this could qualify as an "order message to the electronic exchange" as recited in claim 1. As regards the "means for setting a trade order parameter", it is noted that the broker may enter received orders manually into the system (page 13, last paragraph) which implies the possibility of setting order parameters.

It is noted that sending a message in D5 requires (at least) touching a displayed order icon followed by touching the SEND FILL button in the fill pane 140 which pops up in the lower portion of the screen (paragraph bridging pages 28/29). The Opposition Division tends not to agree with Opponent II that these actions qualify together as a "selection of one of a plurality of areas", at least if this feature is limited to be performed by a "single action of a user input device", as it appears necessary to overcome to the objection under Article 100(c) EPC 1973 (see point 4.8 above). Indeed the action of touching the SEND FILL button requires a movement of the finger (the button is placed at a different location on the screen than the selected order icon) and it does not contribute to the selection of the order icon as such. Hence, it appears that at least this aspect of the order entry feature of claim 1 would be missing in D5.

#### 17.4 **Novelty over D1 (Derivatives Net)**

D1 is a prior art patent application that was considered by the examining division. It is mentioned in the patent in paragraph [0009].

Opponents I and V argue that claim 1 lacks novelty over D1 but do not discuss all features of claim 1 in detail. The analysis of D1 in relation to the features of independent claim 1 made by Opponent III in the context of its inventive step argumentation is also to be taken into consideration.

The Proprietor argues that D1 does not disclose a field of static prices or indicators moving relative to the field of static prices when the inside market changes. D1 does also not teach any means of placing an order other than by filling in a conventional order ticket.

The Opposition Division agrees with the Proprietor.

The price column in the market detail interface (D1: figure 15) does not qualify as "field of static prices". As noted by the Proprietor, the prices displayed in this column are the prices of all individual orders placed in the market, with some prices being listed multiple times if there are multiple orders pending at the same price (page 64, lines 24 to 26, and figure 15: ask price "6.2378" displayed twice). This is because the system of D1 (see page 67, lines 3 to 12) allows the user to hit or lift individual passive orders placed in the market instead of executing passive orders automatically, as the system presented in the patent does. The displayed prices change therefore when new orders are placed in or old orders are taken out from the market. None of the Opponents indicated a clear basis for a "field of static prices" in D1.

D1 fails also to disclose an order entry region as in claim 1. The procedure for submitting an active order from the market detail interface in D1 (figure 15) is explained at page 64, line 15 to page 65, line 2, to be read in combination with page 63, line 27 to page 64, line 8. The user must first click on a row of the bid or ask window in the market detail interface followed by a click on the HIT resp. LIFT button. A hit resp. lift order window is then opened (figure 14B). All parameters of an active trade order are automatically populated: instrument, order type, order price, order quantity (set by default to the quantity indicated in the selected bid/ask). The user may then either click directly on the OK button to send an order message with these parameters to the electronic exchange or alter first the order quantity before clicking on the OK button. The procedure for placing a passive order involves clicking on the ORD button shown in figure 15 followed by entering trade order parameters including price and quantity in a passive order interface as shown in figure 14A (see page 63, lines 1 to 26, and page 65, lines 25 to 29). In both cases, several different buttons must be clicked to enter an order and the buttons of the function bar shown in figure 15 (hit/lift and ORD buttons) do not qualify as areas aligned with a price level, as required in the order entry region feature of claim 1.



### 17.5 **Novelty over D28 (TIFFE)**

Opponent III suggests that all the features of claim 1 are derivable from D28.

The Proprietor considers that D28 does neither disclose a "field of static prices" nor movements of indicators relative to it. D28 does also not disclose the order entry region feature of claim 1.

The Opposition Division agrees with the Proprietor.

It is first noted with the Proprietor that the screen shot on D28 is unclear. This is not a matter of paper copy quality: the image downloaded from the indicated URL has a very coarse resolution which impedes reading the captions on the screen.

In any case, it is not directly and unambiguously derivable that the price column (2) in D28 qualifies as a "field of static prices". Opponent III notes that the number of rows for bids displayed on the screen is different from the number of rows for asks and suggests that this fact implies that the display must be dynamic. The Opposition Division agrees with the Proprietor that this argument is only speculation.

An order entry region feature as in claim 1 is also missing in D28. Opponent III refers to the grey area under reference number 3. This area appears to represent a panel of buttons to enter some data. Its relationship to submitting orders is however not clear. More significantly, it does clearly not appear to comprise selectable areas "aligned with a price level in the field of static prices" such that selection of one of these areas sends an order based, inter alia, on "the price level that is aligned with the selected area", as required by claim 1.

### 17.6 **Novelty over D11 to D15 (LIFFE CONNECT Manuals)**

Opponent I submits that claim 1 lacks novelty over "The Application Program Interface (API) Reference Manual: For LIFFE CONNECT". D11 to D15 are provided as evidences. Opponent I refers also to the deposition of Mr. MacGregor (D21) who is said to have testified that "*the LIFFE Connect Prior Art Manuals described an order entry system as described in the previous paragraph*". Reference is made to pages 69 and 86 to 90 of D21.

The Proprietor notes that no section of the manual is cited in support of this finding and submits simply that a review of the manual reveals nothing in the manual that discloses all the features of claim 1.

The Opposition Division notes first that Opponent I has not indicated which of the submitted versions of this manual (D11 to D15) is specifically referred to. Each of these manuals is approximately 90 pages long. The lack of any citation of specific sections of these manuals in support of the assertion of lack of novelty implies that this assertion is unsubstantiated.

A review of D11 to D15 by the Opposition Division did also not reveal any section which prima facie could prejudice the novelty of claim 1. It is noted that the diagram at page G-3 of D12 (a similar diagram is shown in the last annex of each of the other versions) is merely illustrating how LIFFE manages incoming orders. It does not at all relate to a graphical user interface through which a user could place electronic orders.

The cited passage of Mr. MacGregor's deposition D21 appears to relate to D12 (see D21: page 86) but does not appear to provide any support to the finding that claim 1 lacks novelty over D12 (or over any of D11 and D13 to D15). It is noted that the statements from page 91, line 24 to page 92, line 21 of D21 appear rather to confirm the interpretation by the Opposition Division of the diagram at page G-3 of D12.

#### 17.7 **Novelty over D20 (IRIS)**

Opponent I submits that claim 1 lacks novelty over D20 which is a brochure related to the IRIS system.

The Proprietor argues that D20 does not show a "field of static prices" and has no relevant movement falling within the scope of the claims. The functionality of the IRIS system described in D20 appears rather to be identical to the prior art type screen display illustrated in relation to figure 2 of the patent whereby the ask price and quantity columns of figure 2 would have been rotated and placed on top of the bid price and quantity columns. The IRIS display appears thus to always display the best bid price and the best ask price in the same two different rows in the middle of the screen. As prices in the inside market change, the prices displayed in the best bid cell and the best ask cell in the IRIS display must therefore change. Furthermore, while D20 refers to "point and click entry", it does not describe this feature any further and therefore does not teach the order entry region feature of claim 1. The IRIS display appears rather to have a standard order entry ticket built therein, as "BUY" and "SELL" buttons with a number of fields that appear to allow a trader to fill a price and quantity are displayed on the right side of the interface.

The Opposition Division agrees with the Proprietor on all points.



### 17.8 **Novelty over D22 to D24 (APT)**

Opponent I appears to allege that claims 1 lacks novelty over the pre-1994 and/or the post-1994 versions of the APT system. D22 to D24 appear to be related to these alleged prior uses and are therefore considered in the following.

The Proprietor submits that no document relating to the APT system teach the static aspect of the invention.

The Opposition Division notes that Opponent I does not cite any specific passages of D22 to D24. It is not clear how the statements in D21 cited by Opponent I relate to specific passages of D22 to D24.

A review of D22 (in particular section 35), D23 (in particular the sections "Orders and Requests" and "The Order Summary Display") and D24 (in particular section 4.2) by the Opposition Division did not reveal any passage that would disclose details of a graphical user interface through which a user may submit orders in the APT system that would include all the features of claim 1, in particular the display of a "field of static prices" and the provision of selectable areas aligned with price levels to send orders as in the order entry region feature of claim 1. It is also noted that the disclosure of these documents is not clear given the lack of screen shots of the graphical user interfaces mentioned therein.

### 17.9 **Novelty over D30 (ORC) and further (alleged) written prior art**

The Opponents have not argued that claim 1 would lack novelty over the further (alleged) written prior art. The Opposition Division does also not see any reason to raise such an objection.

It is only noted that D30 (ORC user manual) appears to disclose an order entry mechanism allowing to submit an order (with preset order quantity) by a single double click on a price area in a market depth display similar to that shown in figure 2 of the patent: see in particular pages 1-16, 1-17 and 9-13 of D30. The system of D30 appears however to lack at least a field of static prices and a dynamic display of the internal market relative to this field of static prices as in claim 1 (like the system shown in figure 2 of the patent).

## Article 100(a) EPC 1973 - Inventive step

### 18 *Inventive step over commonplace computer system*

Opponents I, IV and V argue that the subject-matters of the independent claims lack an inventive step (Article 52(1) EPC and Article 56 EPC 1973) as they do not involve a technical solution to a technical problem over a commonplace computer system.

The Opposition Division tends not to agree with the Opponents because the technical aspects of the subject-matters of the independent claims appear to go beyond commonplace computer system and/or computer-readable storage medium features, as addressed at point 9.5 above.

### 19 *Most relevant (alleged) prior art*

At present, it appears that the most relevant (alleged) prior art for the assessment of inventive step of the independent claims are D6 (TSE), D25 (GL Trade), the associated alleged prior public uses, and D30 (ORC).

### 20 *Inventive step starting from D6 (TSE)*

At present, it appears to the Opposition Division that at least the subject-matters of the independent claims would lack an inventive step (Article 52(1) EPC and Article 56 EPC 1973) starting from D6.

As addressed at point 16.1, D6 appears to disclose with the mode of operation arising from the combined selection of the "uncompressed price display method" and the "scroll screen" (referred to in the following simply as the "scroll screen" mode of operation) a system having in combination all the features of claim 1 except the order entry region feature.

D6 does disclose details of an order entry mechanism (see D6b: page 9-5) but does not appear to disclose clearly and unambiguously whether this mechanism is available in the basic board screen mode of operation only or also in the scroll screen mode of operation. However, it would in any case be a most obvious consideration of the skilled person to make the order entry mechanism described at page 9-5 of D6 available in the scroll screen. There is nothing in D6 that would exclude it - it is simply not stated.

In such a situation, it appears permissible to the Opposition Division to define the technical problem with respect to D6 with this very natural addition, instead of D6 itself, as a skilled person would hardly regard the above consideration as a separate mental step when reading D6. The approach adopted in decision T 907/00 (see point 6.5) appears applicable to the present case.



Starting from D6 with this very natural addition, the technical problem would be to enable faster order entry from the scroll screen.

The order entry mechanism in D6 involves selecting an area aligned with a price level in the field of static prices. This opens an order entry window in which a number of trade order parameters (including the preset parameter commodity name and the order price determined based on the price level with which the selected area is aligned) are automatically populated but the user needs to enter the desired order quantity and then click on the Send button.

The question is thus whether it would have been obvious to a skilled person, faced with the above technical problem, to consider further streamlining the order entry procedure in D6 by enabling the user to preset the order quantity (and any other order parameter not automatically determined by the order entry mechanism in D6) so as to enable that double-clicking on an area submits directly an order message to the electronic exchange, the order message comprising the preset parameters and the price determined based in the price level with which the area aligned, to the electronic message.

At present, the Opposition Division tends to follow the arguments put forward by Opponent II in OP2 (section 4.1.3, second last paragraph, and section 4.1.4) and by Opponent V in OP5 (sections X.3 and X.4) that these considerations would have been obvious to a skilled person at the earliest claimed priority date. The Proprietor's counter-argument does not go beyond emphasising the difference between claimed subject-matter and D6. While this supports novelty, it is not convincing for inventive step.

21 *Further remarks*

While D6 appears to represent the most promising starting point for the assessment of inventive step, it is not excluded that starting from other (alleged) prior art may lead to the conclusion that the subject-matters of the independent claims lack an inventive step.

As regards the assessment of inventive step starting from D5 (Guterman et al.), it is noted that it may require a particularly detailed analysis of the technical and non-technical aspects of the differences between D5 and the claimed invention, including the difference between their respective purposes.

### Concluding remarks

22 The parties are invited to present their comments on the preliminary opinion of the Opposition Division.

23 It appears that the outcome of the present case will depend in the first place on whether the Proprietor will manage to overcome the various objections under Article 100(c) EPC 1973 by providing convincing arguments and/or by submitting suitable amendments.

Should the Proprietor succeed in overcoming the ground of opposition under Article 100(c) EPC 1973, the outcome of the present case may well hinge upon the public availability of the most pertinent alleged prior art, in particular D6 (TSE), D25 (GL Trade), the associated alleged prior public uses, and D30 (ORC).

The Opponents have the opportunity to present in reply to this communication their full case in support to the alleged publication dates and prior public uses indicated in the notices of opposition.

The Opponents must expect that later filed submissions in this respect may not be admitted by the Opposition Division under Article 114(2) EPC 1973.

The Opposition Division emphasises also that this is not to be misunderstood as a general invitation to submit new grounds, facts and evidences going beyond the legal and factual framework of the opposition as defined by the notices of opposition.

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