# PATENTAMTS

# OFFICE

BESCHWERDEKAMMERN BOARDS OF APPEAL OF CHAMBRES DE RECOURS DES EUROPÄISCHEN THE EUROPEAN PATENT DE L'OFFICE EUROPEEN DES BREVETS

#### Internal distribution code:

- (A) [ ] Publication in OJ
- (B) [ ] To Chairmen and Members (C) [ ] To Chairmen
- (D) [X] No distribution

# Datasheet for the decision of 24 September 2010

T 1418/07 - 3.5.01 Case Number:

Application Number: 97926197.1

Publication Number: 0909423

G06F 17/60 IPC:

Language of the proceedings: EN

#### Title of invention:

Distributed matching system for displaying a book of credit filtered bids and offers

#### Applicant:

Reuters Transaction Services Limited

#### Opponent:

#### Headword:

Credit filter/REUTERS

## Relevant legal provisions:

EPC Art. 52(1) RPBA Art. 11

#### Relevant legal provisions (EPC 1973):

EPC Art. 56

#### Keyword:

"Inventive step (all requests): no"

#### Decisions cited:

T 0641/00, T 0258/03

#### Catchword:



Europäisches Patentamt European Patent Office

Office européen des brevets

Beschwerdekammern

Boards of Appeal

Chambres de recours

Case Number: T 1418/07 - 3.5.01

DECISION

of the Technical Board of Appeal 3.5.01 of 24 September 2010

Appellant: Reuters Transaction Services Limited

5, rue de Jargonnant 1207 Geneva (CH)

Representative: Musker, David Charles

R.G.C. Jenkins & Co 26 Caxton Street

London SW1H ORJ (GB)

Decision under appeal: Decision of the Examining Division of the

European Patent Office posted 26 February 2007

refusing European patent application

No. 97926197.1 pursuant to Article 97(1) EPC

1973.

Composition of the Board:

Chairman: S. Wibergh

Members: R. R. K. Zimmermann

G. Weiss

- 1 - T 1418/07

## Summary of Facts and Submissions

- I. European patent application number 97926197.1, international publication number WO 97/45802, claims a priority date from 1996 in respect of a distributed matching system for displaying a book of credit filtered bids and offers.
- II. The examining division refused the application in oral proceedings on the basis of claims filed by a letter dated 3 October 2003. According to the reasons of the decision posted on 26 February 2007 the claims were related to a technical implementation of a business method which did not involve an inventive step. The examining division cited various prior art documents, among others the US patent number US 5 375 055 published in 1994 (document D1), but did not use any of them in the inventive step objection.
- III. The appellant (applicant) lodged an appeal against the decision on 8 May 2007, paying the appeal fee on the same day. By a letter dated 5 July 2007 and received in the EPO on 6 July 2007 the appellant filed different sets of amended claims and a statement setting out the grounds of appeal including a witness statement by the expert and co-inventor Mr David L. Silverman, New York, USA.
- IV. The Board issued a provisional opinion under Rule 100(2) EPC, maintaining the inventive step objection but basing it on document D1 as closest prior art.

- V. In the oral proceedings requested by the appellant and held on 24 September 2010 no one was present on behalf of the appellant. The day before the Board had been informed that the appellant would not be attending the oral proceedings.
- VI. The appellant has requested in writing that the decision under appeal be set aside and a patent be granted or the case be remitted to the examining division on the basis of claims 1 to 6 filed with letter dated 3 October 2003 and claims 7 to 13 filed with letter dated 5 July 2007 (main request) or alternatively on the basis of claims 1 to 13 (first auxiliary request) or claims 1 to 12 (second auxiliary request), both auxiliary requests filed with letter dated 5 July 2007. In the event that the board was not inclined to grant or remit the main request, oral proceedings have been requested.
- VII. Claim 1 of each request is worded as follows:

### Main request:

"1. A distributed electronic trading system, comprising  $\frac{1}{<>}$ :

a host (101) for receiving and storing orders for multiple trading instruments and credit information entered by a plurality of trading entities, for transmitting said orders and display parameters, and for selectively transmitting said credit information; a plurality of intelligent nodes (102, 106, 110, 113) 2<<>, each assigned to one or more of the plurality of trading entities, for receiving said orders, said selected credit information and said display parameters from said host, said intelligent nodes comprising

- 3 - T 1418/07

3-<means> for screening said orders using said selected credit information and said display parameters to generate and transmit individual market display information for each said assigned trading entity, said market display information including a price and a quantity of the top N available orders for at least one of said trading instruments; and a plurality of keystations (107-109, 111-112), each associated with a trading entity, for receiving and displaying said individual market display information; 4-<characterised in that N is more than 1>.

Numbered angle brackets  $\frac{1}{<>}$ ,  $\frac{2}{<>}$  etc. are added for convenience to indicate the passages where the wording of the auxiliary requests differs from the main request. The indicated passages read as follows:

#### First auxiliary request:

 $^{1}$ <a communications network (150) interconnecting>  $^{2}$ <distributed throughout the network remotely from one another>

 $\frac{3}{4}$  a processor>

## Second auxiliary request:

 $\frac{4}{3}$ <in which N is more than 1;

wherein said host selects the credit information to be transmitted to each of said plurality of intelligent nodes using a credit threshold value to limit the number of update messages transmitted from the host to the intelligent nodes>

- VIII. The appellant's submissions on the merits of the case are summarised as follows:
  - (a) Remittal of the case to the first instance was appropriate since the applicant had had the benefit of only a single examination report. This had to be seen on the background that in the course of the examination proceedings the invention had successively been found to involve an inventive step and be patentable over the cited prior art; be unpatentable excluded matter; and finally be non-inventive, without any reference to the prior art. Neither the technical problem nor the technical solution that the invention provided had been adequately taken into account in rejecting the application.
  - (b) The invention was in the field of trading systems, and specifically, in the field of anonymous trading systems in which offers and bids were distributed to different keystations of traders of different institutions anonymously. In such a system, it was necessary to send messages between the central computer and the keystations for a variety of purposes, and to perform processing of several sorts. The selection of where data was processed had a significant effect on the data flows through the network, and was thus of technical significance. The vast number of calculations to be performed posed a technical challenge given the limitations of available hardware at the priority date. Several design problems had to be addressed, including bandwidth and processing constraints.

- 5 - T 1418/07

(C) Using a plurality of intelligent nodes distributed throughout the network solved these technical problems of bandwidth and limited processor hardware capacity in a centralised anonymous trading system. Taking the credit-filtering and book-ordering function away from the central computer and assigning it to a plurality of intelligent nodes made the processing scalable because the layer of intelligent nodes decoupled the dependence of the host on the number of keystations. This avoided overloading the host and creating processing constraints, and it allowed the system to provide, to a trader, market information for a price and a quantity of the top N (more than 1) available orders for a trading instrument based on credit information.

### Reasons for the Decision

- The appeal, although admissible, is not allowable as none of the requests meets the inventive step objection.
- 2. Main request
- 2.1 Prior art document D1 discloses an electronic brokerage system based on a hierarchical server-client structure for automated trading of financial instruments (see D1, claim 1 and for example cols. 1-2, figures 1 and 5 with description, cols. 5-6 and 12-13). It is thus a distributed electronic trading system in terms of present claim 1. A communications network interconnects a host (arbitrator ARB) for storing orders, a plurality

of intelligent nodes (market distributors MD and market access nodes MAN) for performing various functions of the trading system, and a plurality of keystations (trader workstations WS), each associated with a trading entity, for receiving and displaying individual market display information.

- 2.2 The trading system claimed differs from the prior art only by the character of the trading tasks performed by the trading system. These differences directly result from business considerations. The implementation of such tasks on a computer system of the type disclosed in document D1 does not provide an inventive contribution over the prior art.
- 2.3 No technical problem in respect of the claimed invention exists other than the implementation task. The appellant is correct in arguing that the workload on a central host depends strongly on the number of keystations and that by distributing the trading processes over a plurality of intelligent nodes the host is relieved of excessive workload. However, this problem is already solved by the trading system of document D1 using the distributed nodes MD and MAN for screening orders and performing other computationally challenging tasks. The workload problem is, in respect of document D1, not relevant any more for assessing inventive step of the present invention.
- 2.4 For these reasons, the main request does not escape the objection of lack of inventive step (Article 52(1) EPC and Article 56 EPC 1973).

- 7 - T 1418/07

### 3. First auxiliary request

The limitations to claim 1 in accordance with the first auxiliary request have already been considered above in connection with the main request. The reasons given above for lack of inventive step therefore apply directly to claim 1 of the first auxiliary request.

- 4. Second auxiliary request
- 4.1 Claim 1 adds the feature that the host selects the credit information using a credit threshold value to limit the number of update messages transmitted from the host to the intelligent nodes. As the appellant has rightly argued, reducing the network load is a technical problem.
- 4.2 However, the suggested thresholding is not a technical solution to this problem but merely an administrative measure based on business considerations for circumventing the technical problem. Problem solutions of this kind, which lack technical character, have no significance for the purpose of assessing inventive step (see decisions T 641/00 "Two identities/COMVIK", OJ EPO 2003,352, point 6 of the reasons; and T 258/03 "Auction method/HITACHI", OJ EPO 2004,575, point 5.7 of the reasons).
- 5. In summary, the subject matter claimed according to all requests lacks an inventive step. The appeal, therefore, is not allowable.

- 8 - T 1418/07

6. The appellant's request to remit the case to the examining division is not allowed, considering that no fundamental deficiencies in the first instance proceedings are apparent (Article 11 RPBA) and that the appeal is not allowable on its merits.

## Order

# For these reasons it is decided that:

The appeal is dismissed.

The Registrar:

The Chairman:

T. Buschek

S. Wibergh