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Datasheet for the decision of 19 September 2017

Case Number: T 1211/11 - 3.5.01

Application Number: 05809978.9

Publication Number: 1815417

IPC: G06Q40/00

Language of the proceedings: EN

Title of invention:
A FLEXIBLE SYSTEM AND METHOD FOR ELECTRONIC TRADING

Applicant:
Trading Technologies International, Inc.

Headword:
Electronic trading / Trading Technologies

Relevant legal provisions:
EPC Art. 56

Keyword:
Inventive step - changing units used in trading (no - not technical) - effect of reducing bandwidth (no - effect obtained irrespective of technical infrastructure)

Decisions cited:
T 1143/06

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Case Number: T 1211/11 - 3.5.01

D E C I S I O N
of Technical Board of Appeal 3.5.01
of 19 September 2017

Appellant: (Applicant)	Trading Technologies International, Inc. 222 S. Riverside Plaza, Suite 1100 Chicago, Illinois 60606 (US)
Representative:	McCann, Heather Alison EIP Fairfax House 15 Fulwood Place London WC1V 6HU (GB)
Decision under appeal:	**Decision of the Examining Division of the European Patent Office posted on 10 January 2011 refusing European patent application No. 05809978.9 pursuant to Article 97(2) EPC.**

Composition of the Board:

Chairman	W. Chandler
Members:	P. Scriven
	P. Schmitz

Summary of Facts and Submissions

I. This is an appeal against the Examining Division's decision to refuse European patent application 05809978. The Examining Division found that the invention defined by claim 1 according to the main request lacked of inventive step, and declined to admit the first, second, and third auxiliary requests because their respective versions of claim 1 differed from that of the main request only by business matter.

II. With the statement setting out the grounds of appeal, the appellant requested that the decision under appeal be set aside and that a patent be granted on the basis of one of a newly filed main request or a newly filed auxiliary request, both filed therewith.

III. The Board set out its provisional view in a communication sent with the summons to oral proceedings.

IV. In reply, the appellant requested a decision according to the state of the file and withdrew its "pending request for oral proceedings."

V. Claim 1 according to the main request reads as follows.

> *A computing device for use in an electronic trading system comprising a plurality of trading terminals (102; 202; 310) that access an electronic exchange (104; 204, 208; 308), the computing device comprising: means (302) for receiving electronic market data from the electronic exchange, the electronic market data being associated with*

a tradeable [sic] object and comprising quantity information that is based on a unit of a first type, said unit of the first type being a flow-based unit;
means (302) for converting the quantity information that is based on the unit of the first type to converted quantity information that is based on a unit of a second type, said unit of the second type being a contract-based unit, and said converted quantity information being derived from the quantity information having flow-based units and a delivery unit of the tradeable object;
means (302) for transmitting said converted quantity information to a trading terminal capable of displaying the converted quantity information in a screen region of a graphical user interface controlled by a microprocessor on the trading terminal;
means (306) for receiving a first trade order to buy or sell the tradeable object from the trading terminal, the received trade order being initiated on the trading terminal by a command through a user input device, the received trade order having an order quantity parameter that is based on the unit of the second type;
means (306) for converting the order quantity parameter that is based on the unit of the second type to a converted order quantity parameter that is based on the unit of the first type, said converted order quantity parameter being derived from the order quantity parameter having contract-based units and the delivery unit of the tradeable object; and

means (306) for transmitting a trade order to the electronic exchange via the data communications network, wherein the transmitted trade order comprises the converted order quantity parameter.

VI. Claim 1 according to the auxiliary request differs in the third, fifth, and sixth sections, as shown.

...
means (302) for ***using a conversion relationship to convert*** *the quantity information that is based on the unit of the first type to converted quantity information that is based on a unit of a second type, said unit of the second type being a contract-based unit, and* ***the conversion relationship being dependent on the tradeable object such that*** *said converted quantity information* ***is an integer value*** *derived from the quantity information having flow-based units and a delivery unit of the tradeable object;*
...
means (306) for receiving a first trade order ... the received trade order having an order quantity parameter that is ***an integer value*** *of the unit of the second type;*
means (306) for ***using the conversion relationship to convert*** *the order quantity parameter that is based on the unit of the second type to a converted order quantity parameter that is based on the unit of the first type,* ***such that*** *said converted order quantity parameter* ***is*** *derived from the order*

quantity parameter having contract-based units and the delivery unit of the tradeable object; and
...

Reasons for the Decision

Background

1. The invention is concerned with the electronic trading of "tradeable objects", which term "refers simply to anything that can be traded with a quantity and/or price" (published application, page 2, lines 7 - 9). Examples are stocks, derivatives, grain, energy, and metals.

2. The application sets out a problem (published application, page 7, lines 1 - 16). A producer and a distributor of power (say) may talk to one another of selling in terms of megawatt hours for particular time periods, but a professional trader may not be used to those units and rather use a "standardized unit, such as contracts".

3. The invention provides conversion between units, so that (say) power offered in megawatt hours per day are presented to the trader in terms of units the trader is used to. Megawatt hours per day are an example of what the claims call "flow" units (published application, page 16, lines 9 - 16). If 800 megawatt hours are delivered for 21 days, that will make a total of 16800 megawatt

hours, and that is an example of what the claims call "contract" units.

The appellant's arguments

4. The appellant's arguments can be summarised as follows.

5. The problem solved by the invention was [h]*ow to present information for tradeable [sic] objects traded in flow so it can be interacted with, and data entry can be carried out, quickly and accurately by a user unfamiliar with flow-based units* (page 4 of the statement of grounds), or, formulated somewhat differently, *how to improve the accuracy and speed with which trade orders are placed by users unfamiliar with tradeable objects having flow-based units* (page 7 of the statement of grounds). A user might enter an order in a form the exchange would reject, or make calculations to convert between units, which would be slow and subject to errors. The invention also reduced the *wasted transmission of messages and the unnecessary use of bandwidth* (page 5 of the statement of grounds).

6. The identification of the problems required familiarity with electronic trading tools. It would not be a routine matter to conceive of a conversion of units because objects traded in "flow" units are not normally traded in "contract" units.

7. From *T1143/06, Data selection system, not published in OJ EPO*, and *T1029/06, Environmental impact estimation, not published in OJ EPO*, the conclusions could be drawn that it was possible for a feature related to the manner in which cognitive content is conveyed to a user to contribute to inventive step, if a credible technical effect is demonstrated; one manner of demonstrating a

credible technical effect was to claim the concrete implementation of a method, and another was to show that there was a resultant change in a physical entity or process.

8. Claim 1 according to the main request defined the conversion in concrete terms, with the advantage that different conversions could be applied to different tradable objects. The invention went beyond a simple conversion such as between SI and imperial units, so that, even if the idea of converting units were an obvious one, the conversion defined by the claim would not be.

9. There was a synergy between the technical and non-technical features, because they together lead to faster and more accurate data entry. The appearance (to the trader) of trading in "contract" units was a surprising effect, because actual trades took place in "flow" units.

Main request, inventive step

10. The Examining Division stated, and the Board agrees, that the technical starting point for the invention is a distributed information system comprising multiple general purpose computers at different locations and connected by a communication network. On this infrastructure, the method defined in claim 1 is performed.

11. The problems set out by the appellant are traders' problems and they are problems that are independent of the technical infrastructure. It is not the implementation on a computer system that makes "flow" units difficult for the trader and "contract" units easy.

A trader working by word of mouth or by mail-order or by any other means of communicating would have the same problems.

12. The argument in terms of wasted transmissions and bandwidth does not help the appellant. Wasted messages occur, if at all, irrespective of any technical infrastructure, because trading requires communication, whether technical or not. The invention is an aid to the trader, and allows her to use familiar units and and so trade more quickly and more accurately. But it is not a technical matter.

13. The Board does not agree with the appellant's arguments regarding T 1143/06. The assertion is that one way of demonstrating a technical effect is to claim a concrete implementation, but that is not what the decision says. The relevant passage is in paragraph 3.4: *If the new features of a claim concern the presentation of information itself (rather than its concrete implementation) a patent can only be granted if they also produce a technical effect.* This makes a distinction between a presentation of information per se and their concrete implementations. In the case of the former, the decision says, a patent can only be granted if a technical effect is produced. For the case of concrete implementations, the decision says nothing.

14. In the present case, the steps defined in claim 1 are concrete only to the extent that they are carried out on means suitable for doing so. For example, the claim defines means for converting information based on "flow" units to information based on "contract" units. This device is a technical feature. However, it would be incorrect to conclude that the conversion of units per se inherits this technicality. Rather, the "means for

converting" is a technical implementation of a non-technical step and the relevant question is: would it have been an obvious technical implementation in the context of the remainder of the claim?

15. The invention, then, amounts to an implementation, on a distributed computer system, of a non-technical method. The implementation is technical, but there is no back-propagation: the method remains non-technical. The steps of the method have been chosen to facilitate trading. They have not been chosen to overcome a problem in the distributed computer system. They do not contribute to inventive step.

16. In the Board's view, implementation on a distributed computer system would have been obvious. The method requires the collection, storage, presentation and conversion of data, and distributed computer systems are good at those things. Furthermore, it is common ground that electronic trading systems were known, and no step of the present method is unsuitable for implementation on a computer system.

17. A particular technical implementation requires the solution of a technical problem. It is, in this case, how the method should be implemented on a distributed computer system. The claimed solution is the provision of means for performing each of the steps, but any implementation must carry out each of the steps.

18. The Board, therefore, concludes that the invention defined in claim 1 does not involve an inventive step. The main request cannot be allowed.

Auxiliary request, inventive step

19. The use of a conversion relationship is already implicit in the main request. Its dependency on the object to be traded is part of the business method, as is the restriction to integer quantities.

20. Claim 1 of the auxiliary request, therefore, adds no technical features and lacks inventive step for the same reasons. The auxiliary request cannot be allowed.

Order

For these reasons it is decided that:

The appeal is dismissed.

The Registrar: The Chairman:

T. Buschek W. Chandler

Decision electronically authenticated