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Datasheet for the decision of 28 May 2008

Case Number: T 1102/03 - 3.5.01

Application Number: 95114467.4

Publication Number: 0762304

IPC: G06F 17/60

Language of the proceedings: EN

Title of invention:
Computer system for data management and method for operating said system

Patentee:
Citibank Aktiengesellschaft

Opponents:
Opponent 01: Siemens Nixdorf Informationssysteme AG
Opponent 03: Bayerische Vereinsbank AG
Opponent 04: COMMERZBANK AG
Opponent 05: csg Computer Services GmbH
Opponent 06: Deutsche Bank AG
Opponent 07: Deutsche Börse AG
Opponent 08: DZ Bank AG Deutsche Zentral-Genossenschaftsbank
Opponent 09: UBS AG
Opponent 11: TIBCO Inc.

Headword:
Online trading system/CITIBANK

Relevant legal provisions:
EPC R. 106
RPBA Art. 13, 15(2)

Relevant legal provisions (EPC 1973):
EPC Art.56, 113(1)
EPC R. 71a(1)

Keyword:
"Postponement of oral proceedings (no - pre-booked holidays of a party outweighed by extraordinary organisational burden of the case)"
"Inventive step (no)"

Decisions cited:
T 0641/00

Catchword:
The effort of postponing fixed oral proceedings until a date might be found which would suit numerous parties, the members of an extended Board, and the facility management of the European Patent Office, outweighs the effort of postponing or interrupting one representative's holiday booked to a destination within Europe. A strict standard has to be applied under these circumstances because a liberal approach might give rise to a series of postponements (point 2.1 of the Reasons).

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Beschwerdekammern | Boards of Appeal | Chambres de recours

Case Number: T 1102/03 - 3.5.01

D E C I S I O N
of the Technical Board of Appeal 3.5.01
of 28 May 2008

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Decision under appeal: **Decision of the Opposition Division of the European Patent Office posted 7 August 2003 revoking European patent No. 0762304 pursuant to Article 102(1) EPC 1973.**

Composition of the Board:

Chairman: S. Steinbrener
Members: K. Bumes
A. Pignatelli
W. Chandler
G. Weiss

Summary of Facts and Submissions

I. This appeal is against the decision of the opposition division to revoke European patent

B1: EP-B-0 762 304

for lack of inventive step (Article 56 EPC 1973) in the light of pre-published documents and prior uses established by witness testimonies.

II. In the statement setting out the grounds of appeal, the appellant proprietor requested that the decision under appeal be set aside and the patent be maintained based on a claim set corresponding to a (first) auxiliary request underlying that decision. On an auxiliary basis, the appellant requested that the case be remitted to the opposition division for re-opening the taking of evidence with respect to two witnesses.

III. By a communication dated 5 October 2007, the Board summoned the parties to attend oral proceedings on 18 and 19 December 2007. In an annex to the summons, the Board expressed its preliminary opinion that the technical aspects of the claimed data management computer system appeared to be obvious

- from an article D11: "Automation of foreign exchange activity" in: Supplement to Corporate Finance, September 1992, pages 20 to 23, in the light of common general knowledge as exemplified by D31: GB-A-2 161 003, or
- from a straightforward automation of the conventional telephone-based trading practice.

IV. On 11 October 2007, the appellant's representative, Mr. M., requested that the oral proceedings be

postponed because he had firmly booked a Christmas vacation of approximately one month in Switzerland before receiving the summons, and no colleague in his office could take over the case.

V. In a facsimile communication transmitted on 29 October 2007, the Board considered the organisational burden of postponing the oral proceedings in the present case (eleven parties, extended board, room shortage) to be greater than the requesting representative's burden of postponing or interrupting a holiday booked to a destination within Europe. Nevertheless, as a matter of goodwill, the Board was prepared to postpone the oral proceedings to 23 and 24 April 2008 (the nearest opportunity for the Board in terms of availability of members and rooms) if all the parties agreed explicitly at short notice (by 2 November 2007).

VI. The appellant's representative (fax dated 30 October 2007) agreed to the alternative pair of dates but disagreed with the Board's approach to require all parties' explicit consent to a postponement of the oral proceedings. The probability that at least one of the respondents would not agree appeared rather high.

He referred to a Notice of the Vice-Presidents Directorates-General 2 and 3 dated 1 September 2000 concerning oral proceedings before the EPO (OJ EPO 2000, 456), according to which holidays firmly booked before the notification of the summons constituted a serious substantive reason to request a change of the date for oral proceedings.

The representative was used to being summoned four to eight months in advance of oral proceedings and considered the time for preparing the current case not to be in line with the principles of a fair trial in accordance with Article 113 EPC 1973. He argued that he had only ten days left after 2 November 2007 to prepare and file submissions for the patentee within the usual deadline of one month before the fixed date.

VII. By a facsimile communication transmitted on 5 November 2007, the Board informed the parties that several respondents had not agreed to the proposed alternative dates and, therefore, the original pair of dates (18 and 19 December 2007) was maintained for the oral proceedings.

VIII. With letters of 19 and 20 November 2007, the appellant filed eight amended sets of claims (main request and auxiliary requests I to VII) and provided a synoptic analysis of D11, D31 and the claimed computer system together with a paper version of slides designed to demonstrate an inventive step.

With a view to Rule 106 EPC (entering into force on 13 December 2007), the appellant raised an objection under Article 113(1) EPC 1973 because he considered the time for preparing the oral proceedings insufficient. Therefore, he maintained the request for postponement of the oral proceedings.

IX. Oral proceedings before the Board took place on 18 December 2007. The appellant, represented by Mr. M. and Mr. E., another professional representative from

the same law firm, requested that the decision under appeal be set aside and the patent be maintained on the basis of claims 1 to 27 according to the main request or on the basis of claims 1 to 27 according to the first to sixth auxiliary requests or on the basis of claims 1 to 25 according to the seventh auxiliary request, all requests filed on 19 November 2007, or to remit the case to the first instance for re-opening the taking of evidence by issuing summons to a first witness and by requesting the Landgericht München I to re-hear a second witness under oath. The appellant further requested that the oral proceedings be postponed. During the oral proceedings, the case was mainly presented by Mr. E.

The respondents requested that the appeal be dismissed.

(a) Claim 1 according to the main request reads:

"1. Computer system for data management including at least the management of data relating to the trading of warrants at an actual rate, comprising

- an external device (7) including an input unit (2) and a display unit (3),

— a data input (5) receiving at least actual warrant rates and

— a data processing system (1) including

a data interface device (10) receiving a data stream including at least actual warrant rates from the data input (5), and

a data management device (9),

wherein

— the display unit (3) displays a first mask having a format allowing the input of a request for specific data including at least warrant rates by the input unit

(2),

– the data input (5) is read if the request is input by the input unit (2), wherein the external device (7) transmits a quote request to the data management device (9), if said request is input by the input unit (2), the data management device (9) receives the quote request and sends a rate request to the data interface device (10), the data interface device (10) gets an actual rate and transmits it back to the data management device (9) and the data management device (9) transmits the requested data to the external device (7) for displaying on the display unit (3),

- the display unit (3) displays a second mask including the requested data, and

- the data processing system (1) holds the requested data for a predetermined time period T_{set} and performs a transaction relating to the specific data, if a transaction request is input by the input unit (2) during a predetermined time period T_{set},

and if a transaction request is not input during the predetermined time period, a time-out notice is displayed on the second mask of the external device (7), wherein, after receipt of the transaction request from the external device (7), the data management device (9) checks if the predetermined time period T_{set} has not timed out."

(b) Claim 1 according to the first auxiliary request differs in substance from claim 1 of the main request by the deletion of several features, in particular the entire last paragraph ("and if a transaction request...").

(c) Claim 1 according to the second auxiliary request

corresponds to claim 1 of the first auxiliary request and comprises the following *additional features*:

- the data management device (9) *inserts a quotation into its data base, assigns a reference number to the quotation and* transmits the requested data to the external device (7) for displaying on the display unit (3),

– wherein *the external device (7) transmits an execute request to the data management device (9) referring to the transaction by the reference number*.

(d) Claim 1 according to the third auxiliary request has been supplemented with respect to claim 1 of the second auxiliary request by the feature that the quote request transmitted from the external device (7) to the data management device (9) *contains an identification number for the specific data and a volume*.

(e) Claim 1 according to the fourth auxiliary request reads:

"1. Computer system for data management including at least the management of data relating to the trading of warrants at an actual rate, comprising an external device (7) including an input unit (2) and a display unit (3), a data input (5) receiving at least actual warrant rates and a data processing system (1) including a data interface device (10) and a data management device (9), wherein

- the display unit (3) displays a first mask having a format allowing the input of a request for specific data including at least warrant rates by the input unit (2),

– the data input (5) is read if the request is input by the input unit (2),

- the display unit (3) displays a second mask including

the requested data, and

- the data processing system (1) holds the requested data for a predetermined time period T_{set} and performs a transaction relating to the specific data, if a transaction request is input by the input unit (2) during a predetermined time period T_{set},

- wherein during an executing transaction procedure an external device (7) transmits a quote request to the data management device (9), the data management device (9) receives the quote request and sends a rate request to the data interface device (10), the data interface device (10) gets a rate and transmits it back to the data management device (9), the data management device (9) inserts a quotation into its data base, assigns a reference number to the quotation and returns a quotation message with price and instrument details to the external device (7), the external device (7) displays the quotation on the display unit (3) and the external device (7) transmits an execute request to the data management device (9) referring to the transaction by the reference number."

(f) Claim 1 according to the fifth auxiliary request differs in substance from claim 1 of the fourth auxiliary request by adding the feature that the quote request transmitted from the external device (7) to the data management device (9) *contains an identification number for the specific data and a volume*.

(g) Claim 1 of the sixth auxiliary request reads:

"1. Computer system for data management including at least the management of data relating to the trading of warrants at an actual rate, comprising

- an external device (7) including an input unit (2) and a display unit (3),
- a data input (5) receiving at least actual warrant rates and
- a data processing system (1) including a data interface device (10) receiving a data stream including at least actual warrant rates from the data input (5), and a data management device (9), wherein
— the display unit (3) displays a first mask having a format allowing the input of a request for specific data including at least warrant rates by the input unit (2),
— the data input (5) is read if the request is input by the input unit (2),
— the display unit (3) displays a second mask including the requested data, and
— the data processing system (1) holds the requested data for a predetermined time period T_{set} and performs a transaction relating to the specific data, if a transaction request is input by the input unit (2) during a predetermined time period T_{set}, and, if a transaction request is not input during the predetermined time period T_{set}, a time-out notice is displayed on the second mask of the external device (7),
— wherein during an executing transaction procedure an external device (7) transmits a quote request containing an identification number for the specific data and a volume to the data management device (9), the data management device (9) receives the quote request and sends a rate request to a data interface device (10), the data interface device (10) gets a rate and transmits it back to the data management device (9), the data management device (9) inserts a quotation into its data base, assigns a reference number to the

quotation and returns a quotation message with price and instrument details to the external device (7), the external device (7) displays the quotation on the display unit (3) and the external device (7) transmits an execute request to the data management device (9) referring to the transaction by the reference number, wherein after receipt of the transaction request from the external device (7) the data management device (9) checks if the predetermined time period T_{set} has not timed out, wherein the data management device (9) and the data interface device (10) are separate and independent servers."

(h) Claim 1 of the seventh auxiliary request reads:
"1. Computer system for data management including at least the management of data relating to the trading of warrants at an actual rate, comprising an external device (7) including an input unit (2) and a display unit (3), a data input (5) receiving at least actual warrant rates and a data processing system (1) including a security network (6) connected to the external device (7), a security device being a security access manager (8), a data interface device (10), a data management device (9) and an output device (11) handing off complete transactions to a direct dealer interface DDI, wherein
- the display unit (3) displays a first mask having a format allowing the input of a request for specific data including at least warrant rates by the input unit (2),
– the data input (5) is read if the request is input by the input unit (2),
- the display unit (3) displays a second mask including the requested data, and

- the data processing system (1) holds the requested data for a predetermined time period T_{set} and performs a transaction relating to the specific data, if a transaction request is input by the input unit (2) during a predetermined time period T_{set},
- wherein upon the input of the request for specific data by the input unit (2),
- the external device (7) outputs the request for specific data and transmits the request to the security network (6),
– the security network (6) checks the request regarding its authorization and transmits the same to the data management device (9) if the performed checking resulted in an authorization of the external device (7) for the data management device (9),
- the data management device (9) outputs a message to the security network (6) in order to access data from the data interface device (10) if the performed checking resulted in an authorization of the external device (7) for the data interface device (10),
– the data interface device (10) transmits the accessed data to the data management device (9) via the security network (6) and
- the data management device (9) transmits the data to the external device (7) via the security network (6)."

X. The appellant's argumentation can be summarised as follows:

(a) *Request for postponement of the oral proceedings*

The appellant's representative, Mr. M., was surprised that oral proceedings were appointed at two months'

notice after several years' pendency of the appeal file. The usual period for summons issued by other boards was four to eight months, which would be appropriate to the complexity of the present case (as illustrated by a 4-day hearing at the first instance). While the opposition division had put the emphasis on prior uses, the Board's summons confronted the appellant with an unexpected turn to written prior art.

The representative had relied on the above-mentioned Vice-Presidential Notice to advise the appellant that a postponement of the oral proceedings would be possible. The Board's approach not to follow the Notice but to require the respondents' explicit consent to a postponement was unusual and effectively infringed the appellant's right to a careful preparation. According to standard commentaries (e.g. Singer/Stauder, "The European Patent Convention", 3rd edition, Heymanns 2003, Article 113(1) EPC [1973], marginal number 51), the parties must be allowed a reasonable amount of time for presenting their comments. By the time the Board had confirmed the initial pair of dates for oral proceedings, only ten days were left for preparing a submission that could not have been considered late under Rule 71a(1) EPC 1973.

If the oral proceedings were not to be postponed, a fundamental procedural defect would arise, in respect of which an objection was made with a view to Rule 106 EPC.

(b) *Inventive step over D11 and D31*

D11 had been over-interpreted by the respondents, and

the claimed computer system was distinguished by a combination of two prominent features:

(a) warrant rate data was updated not continually for all warrants traded in a marketplace but only for specific warrants for which the user (at external device 7, Figure 2) requested a current rate ("request for specific data"; request mode);

(b) the updated rate data could be used to perform a transaction only within a limited period of time (time-out feature).

Feature (a) kept the data traffic at a minimum, and feature (b) made sure that no outdated rate could be used to perform a transaction. Prior on-line trading systems, including the one described in D31, pointed in a different direction: a plurality of rates were continually or periodically broadcasted in (near) real-time to the user's terminal. When the number of rates increased with respect to D11 (as warrants outnumbered currencies), it was logical for the skilled person to increase the bandwidth of the rate feed channel. The appellant was the first to show that a very simple alternative existed; the time-out feature removed the need for a real-time update.

In addition, the trading system provided significant technical benefits at the implementation level.

XI. The respondents' argumentation can be summarised as follows:

(a) *Request for postponement of the oral proceedings*

Respondent 05 disagreed with the request for

postponement and argued that the 2-month period stipulated by Rule 71(1) EPC 1973 had been respected by the summons and was sufficient for a careful preparation as no fresh document had to be considered in the appeal procedure. In the circumstances of the case, it was not expecting too much of a representative to postpone holidays. The appellant was in fact represented by two representatives, contrary to previous allegations that no substitute representative was available.

Respondent 06 disagreed with the request because any postponement was contrary to the interests of the respondent and the public. The case dated back to 1995, and the lapse of time had to be taken into account in view of the possibility that witnesses might have to be (re-)heard.

(b) *Inventive step*

D11 anticipated the main technical aspects of the claimed computerised trading system, in particular the request mode and the time-out feature ("decision time"). Regarding the real-time trading of warrants, the bandwidth requirement of such a system was difficult or impossible to meet at the filing date of the application. In other words, the skilled person had no choice other than limiting the data flow, the obvious minimum version being a system which transferred only specific rate data upon request.

Implementing that functionality was a matter of routine design. As the opposed patent was silent on any particular implementation detail or benefit, no

inventive step argument could be based thereon. Commercial aspects not contributing to the technical character of the trading system could not enter into the inventive step discussion.

XII. Having discussed the matter with the parties, the Board elaborated the reasons for dismissing the appellant's objection in respect of an alleged procedural defect and informed the parties at the end of the oral proceedings that the decision would be given in writing.

Reasons for the decision

Request for postponement of the oral proceedings

1. According to Article 15(2) of the Rules of Procedure of the Boards of Appeal (RPBA), a change of date for oral proceedings may exceptionally be allowed at the Board's discretion. Examples of circumstances that can be taken into account when exercising this discretion are given in the "Notice of the Vice-Presidents Directorates-General 2 and 3 dated 1 September 2000 concerning oral proceedings before the EPO" (OJ EPO 2000, 456), hereinafter referred to as the "Notice". (This Notice has been confirmed by the Notice of the Vice-President of Directorate-General 3 of the European Patent Office dated 16 July 2007 concerning oral proceedings before the boards of appeal of the EPO (OJ EPO Special Edition 3/2007, 115) applicable to the revised version of the EPC which entered into force on 13 December 2007.)

Point 2.3 of the Notice mentions pre-booked holidays as an exemplary reason for requesting a change of the date

for oral proceedings. On the other hand, points 1.1 and 1.2 of the Notice refer to organisational problems and procedural economy as important criteria to be considered in exercising the discretion when a decision on postponement has to be taken.

2. The appellant's initial request (11 October 2007) for postponement of the oral proceedings was occasioned by holidays booked by its representative, Mr. M. He was of the opinion that this fact on its own justified a postponement. In the Board's view, however, while holiday is a possible valid basis for a request, it is not necessarily a sufficient reason for postponement. All circumstances of the case and all the criteria referred to in the Notice have to be taken into account by the Board when exercising its discretion.

2.1 This case presents circumstances which entail a special organisational burden:

- eleven parties were involved at the beginning of the appeal procedure (now ten parties as two parties have merged);
- an extended Board of Appeal is involved;
- one of the largest rooms usable for oral proceedings was booked for two days and it would have been difficult to make substitute arrangements within a reasonable period (cf. point 1.1 of the Notice).

On the other hand, the representative of the party requesting a postponement had booked a hotel in Switzerland for approximately one month.

The Board judges that the effort of postponing the oral

proceedings until a date might have been found which would have suited the numerous parties, the members of the extended Board, and the facility management of the European Patent Office, would have outweighed the effort of postponing or interrupting one representative's holiday booked to a destination within Europe. A strict standard had to be applied because all parties had to be treated equally and a liberal approach might have given rise to a series of postponements.

2.2 The requirement of procedural economy could have been met if an alternative pair of dates (the Board proposed 23 and 24 April 2008) had been found on which all parties had agreed explicitly and members and rooms had been available. As such an agreement was not reached, the Board for the sake of procedural economy maintained the original pair of dates, 18 and 19 December 2007 (the second day to be used only if necessary).

The Board's attempt was in the appellant's favour and, thus, cannot have infringed the appellant's rights. Requiring the parties' explicit consent was appropriate to avoid further postponements.

2.3 With respect to point 2.5 of the Notice, the Board notes that the appellant was mainly represented at the oral proceedings by a second representative, Mr. E., of the same law firm as Mr. M. According to the minutes of the oral proceedings held before the opposition division, Mr. E. already took an active part in representing the patent proprietor at that hearing. The Board observes that these facts are in contrast to Mr. M.'s previous assertion (11 October 2007) that no

colleague in his office was able to take over the case.

3. The appellant's subsequent requests (30 October and 18 December 2007) for postponement of the oral proceedings are additionally based on the argument that the complexity of the case would have required more time for a careful preparation.

3.1 However, the complexity of the case resides mainly in prior uses alleged by the opponents and investigated by the opposition division at its 4-day hearing. The Board's annex to summons pointed out that the primary issue to be discussed at the oral proceedings before the Board would be an obviousness objection based on a first prior art document (D11) and general knowledge exemplified by a second prior art document (D31). The complexity of that issue is relatively low. The objection based on D11 constitutes a straight-forward attack which for reasons of procedural economy should be dealt with first.

The Board confirmed this approach at the beginning of the oral proceedings and announced that another oral proceedings would be appointed if the decision were to turn on prior use issues.

3.2 So long as a request for postponement of oral proceedings has not been granted, the requesting party cannot simply assume that the request will be granted. The party has to consider the possibility of a refusal of the request and has to prepare the case accordingly to minimise the risk of time pressure. The Board also points out that its decision to maintain the original pair of dates for the oral proceedings was faxed to the

parties on 5 November 2007, i.e. more than six weeks before the appointed pair of dates.

3.3 As mentioned at the oral proceedings, it is the Board's goal not to delay the processing of old cases. The present one has been controversial for over 10 years. It has been handled expeditiously as soon as it became due, a 2-month invitation to oral proceedings not being an unusual practice for the Board. As compared to national minimum notices of summons, which are considerably shorter, the Board holds that the 2-month notice provided for by Rule 71(1) EPC 1973 takes sufficient account of discussions with international clients and the scope of discussion defined in the Board's communication.

4. For these reasons, the Board did not postpone the oral proceedings.

Inventive step (Article 52(1) EPC and Article 56 EPC 1973)

5. The opposed patent relates to a computer-implemented system and method for trading warrants on-line (B1, column 1, paragraph 1). The appellant argues that such a computer system has to handle large amounts of rapidly changing data due to the vast number of tradable warrants (as compared to the limited number of tradable currencies, see e.g. D11). Due to the resulting bandwidth requirement, prior systems did not generally attempt to trade warrants on-line (see e.g. D11, page 21, right-hand column, lines 8 to 11). The philosophy prevailing in the prior art was to feed and update the rates of all tradable items in (near) real-

time to the prospective customer (see e.g. D31, page 2, lines 1 to 88). In contrast to that approach, the invention requires a single selected set of data to be transferred upon request, and the results are still correct, i.e. each transaction is performed at a current rate, because the time-out feature precludes the use of any outdated rate.

6. The Board concurs with the parties in considering D11 as a starting point for the inventive step discussion. That document deals with an automated system for trading foreign currencies (see title). It thus relates to a financial activity which was conventionally carried out by a customer orally requesting an exchange rate from a local bank, the bank obtaining a rate and offering it to the customer and the customer deciding whether or not to accept the offered rate. Since such rates are volatile, the offer is normally held open only for a certain amount of time so that another request cycle must be started if the decision making process takes too long (see also B1, column 1, third paragraph and column 10, lines 38 to 43 in this context).

Although these aspects are clearly business-driven and as such not patentable, their implementation in a computer system involves the technical character required by Article 52 EPC. In the following, the Board analyses the central and most debated features that it considers to be known from D11, irrespective of whether or not these features are considered to make any technical contribution.

6.1 According to D11, a "customer logs on to the bank's foreign exchange computer from his own PC and inputs details of the transaction that he wants to make and the system comes back to him with a rate" (page 20, left-hand column, lines 10 to 16).

As the rate data originates from the bank's foreign exchange computer, the "system" which comes back with a rate must include the bank's computer in order to display the rate on the customer's PC.

The "details" of the transaction must include the names of the currencies to be exchanged and the amount to be traded (the latter being checked against a limit, see D11, page 20, right-hand column, second paragraph).

The system comes back with "a" rate, i.e. it provides and displays the (single) rate pertaining to the desired transaction.

6.2 D11 goes on, page 20: "The customer is then given 'decision time' to decide whether to trade or not" (left-hand column, lines 16 to 18). The decision time is either 30 or 60 seconds (right-hand column, lines 15/16).

This constitutes a time-out feature. If the customer does not perform the transaction within the decision time following the rate offer, D11 implies that he can no longer use the offered rate. He may have to provide some new input of a desired transaction in order to get a current rate, or he may have to wait for an automatic update of the rate (see point 6.3 *infra*). In any event, he can never use an outdated rate.

6.3 Further, D11, page 20: "Rates of exchange are updated either in real-time or refreshed every few seconds" (left-hand column, lines 20 to 22), and "All systems have real-time updates (or as near as makes no difference)" (right-hand column, lines 12 to 14).

The description of the update mechanism is ambiguous. While it is clear that the rates stored in the bank's foreign exchange computer should be updated or refreshed in (near) real-time, D11 does not say whether the specific rate displayed at the customer's PC is also updated/refreshed automatically.

However, this ambiguity does not cancel the fact that D11 discloses a mode of operation in which a specific rate is displayed upon a customer's request and held available for a limited period. That mode is used and re-used by the customer for every type of warrant he is interested in. The Board adds at this point that, technically speaking, warrant rate data cannot be distinguished from currency rate data.

6.4 D11 does not enter into implementation details of the systems described therein but presupposes that the skilled reader is able to put the disclosed functions into practice using standard computing technology available at the time of publication of D11. In the Board's view, the following further details are implied in the system according to D11:

6.4.1 An "external device (7)" as specified in claim 1 (main request, for example) is anticipated by the customer's PC (D11) which conventionally includes an input unit

and a display unit.

6.4.2 While the wording of claim 1 (main request, for example) splits the following functions into plural units, all those functions must be present in the bank's exchange computer of D11:

- The claimed "data input (5)" is anticipated by a (necessarily existent) communication channel in D11 for receiving actual current rate data from a stock exchange so that the bank's exchange computer can then offer a selected rate to a requesting customer's PC.

- The claimed "data interface device (10) receiving a data stream" must be present in the bank's exchange computer of D11 to receive said actual rate data from the stock exchange via the data input (5).

- The claimed "data management device (9)" for controlling the exchange of request and rate data between the customer's PC and the bank's computer and for applying the time-out feature (decision time) must also be present in the bank's exchange computer of D11. While neither claim 1 nor D11 specify explicitly where the time-out check takes place, it is self-evident that it has to take place in the bank's computer and not in the customer's PC since the time-out is monitored in the bank's interest.

Main Request

7. The computer system according to claim 1 thus differs from the aforementioned aspects of D11 by an explicit statement of how the financial data exchange is implemented: the display unit (reference numeral 3 in Figure 1 of B1) displays a first mask for inputting the rate request, and a second mask for displaying the

requested data and for displaying a time-out notice if a transaction request is not input during the predetermined time period ("T_{set}" in B1; "decision time" in D11).

8. It is true that D11 does not rule out the possibility of a displayed rate being updated automatically on the customer's PC. However, claim 1 does not rule out that possibility either. Hence, the claim does not provide any distinction in that respect.

9. The distinguishing display functions set out at point 7 *supra* are not mentioned by D11 but they represent obvious features of a graphical user interface. A "mask" is a broad concept which encompasses any screen design which supports a structured entry or display of data. Such designs are commonplace. Displaying a mask to the customer so that he can input the "details of the transaction that he wants to make" (D11) and read the rate with which "the system comes back to him" (D11) forms part of notorious man-machine interfaces (see e.g. Figure 2 of D31).

Similarly, the general idea of displaying feedback about an operation, non-operation or status of the computer system being used is a matter of routine design. As D11 provides for a decision time, i.e. a time-out feature, the implementing person will naturally envisage some indication to the customer that a time-out has occurred and that the customer has to start again and decide on the next desired trade more quickly. Without such an indication the system could hardly be used.

10. The appellant has argued that he was the first to show a surprisingly simple way to cut the bandwidth requirement by combining the time-out feature with a request mode so that it was no longer necessary to update a large amount of rate data at the customer's terminal while still ensuring that transactions were performed at valid rates.

However, D11 combines the same two measures to the same effect. Hence, only the display features discussed above are novel over D11.

11. Therefore, the Board judges that the computer system according to claim 1 of main request does not involve an inventive step (Article 56 EPC 1973).

Auxiliary Request I

12. Claim 1 of auxiliary request I is broader than claim 1 of the main request because a group of features has been omitted therefrom. Therefore, the auxiliary request covers obvious matter for the same reasons as set out against the main request.

Auxiliary Request II

13. Claim 1 of auxiliary request II adds detail about how a transaction is handled in the computer system of auxiliary request I; the rate data returned to the [customer's] external device (7) via the data management device (9) is assigned a reference number which in turn can be used by the external device (7) to transmit an execute request by reference to that number (if a customer requests that transaction).

14. The Board holds that bank transactions have to be identifiable for purely administrative reasons. Therefore, the assignment of a reference number could not support a finding of inventiveness even if it was innovative (see T 641/00-*Two identities/COMVIK*, OJ EPO 2003, 352, Headnote I). It may be added that conventional financial transactions commonly apply a reference number to a transaction and use it to refer to the transaction instead of repeating full transaction details during each data transfer. That approach provides predictable advantages (savings) and drawbacks (loss of redundancy) which the skilled person weighs up according to practical needs. Moreover, no particular difficulty has to be overcome to implement a transaction system which refers to transactions by their reference numbers.

Therefore, the Board judges that the computer system according to claim 1 of auxiliary request II does not involve an inventive step.

Auxiliary Request III

15. Claim 1 of auxiliary request III adds detail to the structure of a quote request in a computer system according to auxiliary request II; the quote request contains an identification number for the "specific data" (i.e. the desired type of warrant) and a "volume" (i.e. the desired quantity of the warrant).

16. Again, the Board holds that the claimed structure of a quote request represents a purely administrative feature. It may also be added that it is self-evident

and conventional for a trade in financial instruments to include the name or an associated ID number of the instrument and the volume to be traded.

Therefore, the Board judges that the computer system according to claim 1 of auxiliary request III does not involve an inventive step.

Auxiliary Request IV

17. Claim 1 of auxiliary request IV specifies the structure of a quotation message in a computer system according to auxiliary request II; the quotation message which the data management device (9) returns to the [customer's] external device (7) includes price and instrument details.

18. As mentioned above, the system according to D11 returns a rate to the customer. A rate constitutes price information. The Board further holds that including the name or an associated ID number of a financial instrument in a trade represents a purely administrative feature of the computerised trading system. It may also be added that it is conventional for a quotation message to include price and instrument details.

Therefore, the Board judges that the computer system according to claim 1 of auxiliary request IV does not involve an inventive step.

Auxiliary Request V

19. Claim 1 of auxiliary request V merges the features of

auxiliary requests II to IV without, however, exhibiting any synergistic technical effect.

Therefore, the Board judges that the computer system according to claim 1 of auxiliary request V does not involve an inventive step.

Auxiliary Request VI

20. Claim 1 of auxiliary request VI adds the technical feature that the data management device (9) and the data interface device (10) are separate and independent servers.

The patent specification does not provide any significant information on the effects to be achieved by separate servers. "The devices of the data processing system 1 can be realized as separate and independent communicating servers (client-server architecture)" (B1, column 4, lines 13 to 16), and "The network connection between the servers and the message routers enables a used ITS (information trading and settlement system) to be distributed over a number of VAX processors" (B1, column 4, lines 31 to 35).

21. However, at the filing date of the application underlying the patent, arranging computers in a client-server architecture constituted a notorious computing design providing well-known advantages and drawbacks; one server can advantageously serve plural clients in distributed locations but that arrangement implies at the same time that plural clients depend on one server. The skilled person weighs up advantages and disadvantages of centralised and decentralised

structures according to needs and costs. The technical implementation of distributed hierarchical computing was available to him (see e.g. D31, page 1, lines 111 to 128).

Therefore, the Board judges that the computer system according to claim 1 of auxiliary request VI does not involve an inventive step.

Auxiliary Request VII

22. Claim 1 of auxiliary request VII shifts the focus of the computer system to security aspects of the data flows therein; the data processing system (1) includes a security network (6) and a security access manager (8); the external device (7) transmits requests for specific data to the security network (6) which checks the authorisation of the external device (7), and access of the data management device (9) to the data interface device (10) depends on that authorisation; and data is transmitted to and from the data management device (9) via the security network (6).

23. However, security networks (for protecting the transmission of sensitive data) and authorisation procedures (for controlling the access to sensitive data) are necessary and well-known security features in particular in banking environments. A table on page 22 of D11, for example, lists security features including message authentication, ID and password checks and a dual sign-off procedure to ensure that data items are accessed and transmitted safely across the online trading system of D11. The security aspects recited in claim 1 do not therefore extend beyond obvious

generalities.

24. Claim 1 of auxiliary request VII mentions another feature not mentioned explicitly in the preceding requests; the data processing system (1) includes "an output device (11) handing off complete transactions to a direct dealer interface DDI".

According to the description, an output device (11) of the data processing system (1) can be realised by a warrant hand-off server (WHO) (B1, column 4, lines 22 to 24; Figure 2) that hands off complete transactions to a direct dealer interface (DDI) which is part of a DDI system for printing tickets on the dealing floor where the traders are located (B1, column 5, lines 53 to 58).

25. In the Board's view, when a customer's transaction request has been accepted by the data processing system (in particular by the bank's exchange computer), the request must be finally sent to the stock exchange where the warrants are actually traded. This is a necessary purpose of the business scheme implemented by the claimed computer system. That purpose is business-driven and, thus, cannot be taken into account in the discussion on inventive step.

It may be added that the bank's computer in the data processing system of D11 must comprise some output interface for sending the customer's transaction request to the trading floor.

At the same time, neither the claim nor the description of B1 provide specific implementing details of the

direct dealer interface (DDI). Its general implementation is obvious, as implicitly confirmed by the author of the patent who (like the author of D11) left the details of the implementation to the skilled reader's competence.

26. Therefore, the Board judges that the computer system according to claim 1 of auxiliary request VII does not involve an inventive step.

27. None of the computer systems according to the appellant's eight requests involves an inventive step over the system of D11. That finding implies that there is no need to remit the case back to the department of first instance for examining the relevance of alleged prior uses or other prior art.

Order

For these reasons, it is decided that:

The appeal is dismissed.

The Registrar: The Chairman:

T. Buschek S. Steinbrener