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**Datasheet for the decision
of 19 December 2008**

Case Number: T 1044/07 - 3.5.01

Application Number: 03075095.4

Publication Number: 1353285

IPC: G06F 17/60

Language of the proceedings: EN

Title of invention:

Method and apparatus for forming expressive combinatorial auctions and exchanges

Applicant:

Combinenet, Inc.

Opponent:

-

Headword:

Combinatorial auction / COMBINENET

Relevant legal provisions:

EPC Art. 123(2)

Relevant legal provisions (EPC 1973):

EPC Art. 83, 112(1)(a)(b)

Keyword:

"Suspension of proceedings due to referral G 0003/08 pending before the Enlarged Board of Appeal (no)"

"Referral of new questions to the Enlarged Board of Appeal relating to Article 52(1)(2)(3) EPC (no)"

"Admissibility of amendments (no)"

"Sufficiency of disclosure (no)"

Decisions cited:

J 0016/90, T 0166/84, T 0931/95, T 0258/97, T 0641/00,
T 0172/03, T 0258/03

Catchword:

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Case Number: T 1044/07 - 3.5.01

D E C I S I O N
of the Technical Board of Appeal 3.5.01
of 19 December 2008

Appellant: Combinenet, Inc.
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Representative: Land, Addick Adrianus Gosling
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Decision under appeal: Decision of the Examining Division of the
European Patent Office posted 2 January 2007
refusing European application No. 03075095.4
pursuant to Article 97(1) EPC 1973.

Composition of the Board:

Chairman: S. Steinbrener
Members: K. Bumés
G. Weiss

Summary of Facts and Submissions

- I. This appeal is against the decision of the examining division to refuse European patent application No. 03075095.4 on the basis of an obviousness objection setting out from a notorious networked general purpose computer which does not achieve any technical effect other than the straightforward automation/ implementation of purely intellectual or business related steps in an auction.
- II. The appellant requests in the statement setting out the grounds of appeal that the decision under appeal be set aside and that the case be remitted to the examining division to grant a patent on the basis of one of five claim sets (Main Request, Auxiliary Requests I to IV) attached to the statement setting out the grounds of appeal. Oral proceedings have been requested in case the main request is refused.
- (a) Claim 1 according to the main request reads:
"1. A method of processing an exchange, comprising the steps of:
- forming (32) at least one bid for an exchange and creating a corresponding electronic bid signal for conveying over a network (26),
- providing a solver/analyser (38) [sic] responsive to at least one electronic bid signal of an exchange for determining at least one allocation for said exchange, with each allocation having an allocation value;
- receiving at the solver/analyser (38) [sic] the at least one electronic bid signal over a network (26), with each electronic bid signal including at least one

item and an associated bid price;

- providing a storage (6) connected to the network (26) for a set-up database (30) for at least one exchange item (52) and for an exchange description data (EDD) database, the EDD database comprising features (60, 62, 64) to be associated with a bid,
- associating exchange description data (EDD) from the database (30) with the at least one electronic bid signal, said EDD including at least one of the features of reserve price, free disposal, bid attribute, item attribute, adjustment, objective, counting constraint, counting requirement, homogeneity constraint, mixture constraint, feasibility obtainer, constraint relaxer, conditional pricing and quote request;
- receiving the electronic bid signal and associated EDD at a model builder (40) and building a mathematical model based on the received electronic bid signal and associated EDD,
- providing the solver/analyser with the built model and solving the model by determining at least one allocation."

(b) Claim 1 according to the first auxiliary request relates to a system for a combinatorial exchange based on method claim 1 of the main request, with the model builder (40) and solver/analyser (42) specified as follows:

"a model builder (40) for electronically constructing a mathematical model based upon each received bid; and

a solver/analyser (42) for electronically determining an allocation based on the model, wherein the allocation includes an allocation value",

- without however reciting the exchange description data (EDD) database.
- (c) System claim 1 according to the second auxiliary request is based on method claim 1 of the main request; it recites the model builder for constructing a mathematical model, the solver/analyser for processing the mathematical model and determining at least one allocation, and the exchange description data (EDD) database.
 - (d) Method claim 1 according to the third auxiliary request in substance differs from claim 1 of the main request by additionally specifying a quote request feature and rules for determining and outputting a price.
 - (e) System claim 1 according to the fourth auxiliary request differs from claim 1 of the second auxiliary request essentially by adding a quote request feature included in the exchange description data (EDD) database and rules for determining and outputting a price.
- III. The statement setting out the grounds of appeal presents substantive arguments in favour of technical character, novelty and inventive step and asserts numerous commercial benefits of the claimed method and system.
- IV. In a subsequent letter dated 12 September 2007, a copy of which was sent to the President of the EPO, the appellant suggested that the following questions be referred to the Enlarged Board of Appeal under

Article 112(1)(b) EPC 1973 in order to ensure uniform application of the law:

"1. Is a business method involving technical means an invention within Art. 52 of the EPC? If yes, under which circumstances?

2. Is an apparatus constituting a physical entity for carrying out a method for doing business an invention within the EPC?

2a. If not, because of which Article or principle of the EPC?

2b. If yes, could such an apparatus be an invention if the contribution for the skilled computer expert is (partly) non-technical?"

In the appellant's opinion, the above questions have been decided by contradictory decisions of the Boards of Appeal, namely T 258/03, T 641/00 and T 172/03 on the one hand, and T 931/95 on the other hand.

V. The Board issued summons, dated 24 September 2008, to oral proceedings as requested on an auxiliary basis. In an annex to the summons, the Board expressed its preliminary opinion that the method according to the main request related to technical matter. On the other hand, the Board raised objections to all pending requests in particular in relation to Article 123(2) EPC and Articles 83 and 56 EPC 1973.

VI. The appellant's response, filed by letter of 5 November 2008, did not comment on the Board's objections. It drew the Board's attention to the pending referral G 3/08 from the President of the EPO dated 22 October

2008 which refers four questions to the Enlarged Board of Appeal about the patentability of programs for computers.

The appellant assumed that the appeal proceedings in the present case would be stayed until the Enlarged Board of Appeal would have reached a decision and that the oral proceedings scheduled for 19 December 2008 would be cancelled for that reason.

VII. By a facsimile letter of 10 November 2008, the Board informed the appellant that it did not see any impact of the referred questions on the discussion of the five requests in the present appeal case. Therefore, a stay of the appeal proceedings was not occasioned by the referral and the Board maintained its intention to hold oral proceedings as scheduled, i.e. on 19 December 2008.

VIII. By a letter dated 12 December 2008, the appellant's representative informed the Board that he had been instructed not to attend the oral proceedings.

The appellant considers the content of the Board's letter of 10 November 2008 to be contrary to the case law (T 166/84). The outcome of the present case is said to depend clearly and entirely on the Enlarged Board's interpretation of the relevant provisions of the EPC, viz. "whether the case law on the base of which the present Board of Appeal intends to refuse the above application is correct". Hence, a decision refusing the application would be a substantial procedural violation by the Board which would leave the applicant no other option than a petition for review by the Enlarged Board.

Therefore, the Board should suspend the proceedings until an outcome of the referral from the President of the EPO is received.

- IX. The Board held oral proceedings in the appellant's absence and pronounced its decision.

Reasons for the decision

1. *The application*

The application is entitled "Method and apparatus for forming expressive combinatorial auctions and exchanges" and was published as

A2: EP-A2-1 353 285.

1.1 *Problems to be solved by the application*

An object of the invention is to provide "an input specification mechanism that supports efficient processing in a way to maximize seller revenue while minimizing buyer cost" (A2, paragraph 0007).

An exchange objective could be "to maximize the number of items traded or to maximize surplus", which leads to a mathematical problem of combinatorial exchanges: "determination of winning bids that optimizes the objective" (paragraph 0006).

Generally, combinatorial exchanges are supposed to achieve "best economic efficiency" by supporting expressive bidding (paragraph 0004); "best economic allocation" is expected from combinatorial bids that

allow bidders to express their true preference (paragraph 0005).

1.2 *Solution*

The bids (pay bids in a forward auction; ask bids in a reverse auction) are associated with processing instructions, or "exchange description data (EDD)", and are processed in accordance with the EDD "to achieve a desired exchange outcome" (A2, paragraphs 0030 and 0033).

An exchange server (38) includes a model builder (40) which constructs a mathematical model of the exchange based on exchange data and EDD features. A solver/analyser (42) is utilised to process the mathematical model (paragraph 0039).

1.3 *Effects achieved*

The use of exchange description data (EDD) allows "more economically efficient and participant-friendly marketplaces" (A2, paragraph 0051). An objective feature (257) of global EDD (64) establishes a maximization or minimization goal that solver/analyser 42 utilizes to determine an allocation value for an exchange (paragraph 0083). An objective can be surplus, traded bid volume, traded ask volume or traded average volume (paragraph 0084). The meaning associated with the objectives causes solver/analyser (42) to perform a specific optimization. An objective is useful because it enables specification of exactly what is wanted in a forward auction or exchange (paragraph 0085).

2. *Article 123(2) EPC - Admissibility of amendments*

Original claim 1 summarises the handling of exchange description data EDD in a general manner: "associating exchange description data (EDD) with the at least one bid" and "receiving the associated EDD at the solver/analyzer". None of the original claims specifies a "model builder" or "mathematical model".

- 2.1 Amended claim 1 (all requests) incorporates a model builder (40) which constructs a mathematical model to be processed by a solver/analyser (42).

This feature is based on paragraph 0039 and Figure 3 of A2 (box 40 in exchange server 38).

- 2.2 An additional feature in amended claim 1 (main request, auxiliary requests 2 to 4) relates to the storage (6) being for a set-up database (30) "and" an exchange description data (EDD) "database".

- 2.2.1 However, according to paragraph 0035 of A2, the exchange description data (EDD) is simply included in the exchange setup database (30) which forms part of the computer system 2-2 of exchange manager 24. A2 does not specify an EDD database in computer system 2-2. The only database specified is the exchange setup database (30) (see also Figure 3 of A2).

- 2.2.2 An EDD database does exist in the computer system 2-1 of a bidder 22. The bidder downloads some or all of the EDD features from exchange setup database 30 into his "EDD database 34" (paragraph 0036 and Figure 3).

However, the bidder's computer system 2-1 does not host an exchange set-up database (30).

2.2.3 It is true that the bidder EDD database 34 may reside "at a location other than computer system 2-1" (paragraph 0037, last sentence), and the exchange setup database 30 may reside "at a location other than computer system 2-2" (paragraph 0035, last sentence). However, those general statements do not amount to a specific disclosure of a common storage for the two databases 30 and 34.

2.3 Therefore, the Board judges that claim 1 of the main request and auxiliary requests 2 to 4, respectively, extends beyond the content of the application as filed and, thus, contravenes Article 123(2) EPC. Accordingly, the aforementioned requests are not allowable for this reason alone.

3. *Article 83 EPC 1973 - Sufficiency of disclosure*

The amended claim 1 (all requests) refers to a model builder (40) for building a mathematical model and providing it to a solver/analyser (42) to determine an allocation.

3.1 In its annex to the summons, the Board has raised doubts about whether the application enables the skilled person to construct a mathematical model so as to achieve the efficiency and optimisation goals of the application.

The Board's doubts were mainly based on the fact that the application provides a non-definition of the model

builder and solver/analyser: the solver/analyser is said to receive and solve the built model, and the model is said to fit the capabilities of the solver/analyser (paragraph 0039; no other part of A2 refers to model building). This does not place any restriction on the model although only particular models will meet the allocation purposes sought.

- 3.2 The application (A2, paragraph 0039) briefly mentions two exemplary types of solver/analyser, one type summarily referring to an "incorporated" pre-published document,

D0: US-B1-6 272 473,

and stating that the solver/analyser may be based on the "method, apparatus and data structures for optimal anytime winner determination" described in D0. In such a case, the mathematical model would include a type of search described in that document.

However, the application does not provide any guidance on when to choose what type of solver/analyser and on how to adapt a candidate solver/analyser (and corresponding mathematical model) to the circumstances specifically created by the present application, i.e. the introduction of exchange description data.

Hence, the skilled person has to find out himself how to carry out the very heart of the invention presented by the application, and the choice of an appropriate mathematical model may require extraordinary mathematical skills.

- 3.3 The appellant has not provided any comment on that objection even though he had opportunities to do so in

writing and/or orally. In the absence of any cooperation by the appellant in clarifying this issue and establishing the facts, the Board's doubts persist (cf. T 258/97-*Multi-address call/CANON*, not reported in OJ EPO, point 7 of the Reasons).

3.4 Therefore, the Board judges that essential features are missing in claim 1 (all requests) and in fact in the application as a whole. In particular, the claimed method/system cannot be carried out in the whole range claimed, contrary to the requirements of Article 83 EPC 1973. Since this deficiency also affects claim 1 of the first auxiliary request, it must also be refused.

4. In view of the above findings, the discussion of any further objection raised in the Board's communication can be foregone.

Procedural issues

5. *Referral of questions to the Enlarged Board of Appeal*

5.1 As noted above (point IV), the appellant has formulated two questions to be brought before the Enlarged Board of Appeal due to an alleged contradiction between T 931/95-*Controlling pension benefits system/PBS PARTNERSHIP* (OJ EPO 2001, 441) and T 258/03-*Auction method/HITACHI* (OJ EPO 2004, 575). According to the appellant, T 931/95 "was more in line with the European Patent Convention (EPC) where only methods for doing business are excluded, and not apparatus or systems" (original emphasis).

5.2 The appellant himself considers his questions to be "questions under Article 112(1)(b)" EPC 1973. That provision of the EPC concerns the right of the President of the EPO to refer a point of law to the Enlarged Board of Appeal where two Boards of Appeal have given different decisions on that question.

Hence, a referral under Article 112(1)(b) EPC 1973 is not a matter to be decided by the Board.

5.3 According to Article 112(1)(a) EPC 1973, the Board of Appeal shall, in order to ensure uniform application of the law, or if an important point of law arises, refer any question to the Enlarged Board of Appeal if it considers that a decision is required for these purposes.

From this it follows *inter alia* that it is not sufficient for the point referred to be of general interest. An answer must also be necessary for the decision on the appeal in question (J 16/90-*Reestablishment of rights/FABRITIUS*, OJ EPO 1992, 260, point 1.2 of the reasons). If the appeal must be dismissed for other reasons, a referral is not required and, in fact, is inadmissible.

5.4 In the present case, the Board judges that the application does not meet the requirements of Article 123(2) EPC and Article 83 EPC 1973 whereas the questions formulated by the appellant relate to the issue of eligibility for patent protection under Article 52(1)(2)(3) EPC 1973. Therefore, the outcome of the present case does not depend on answers to the appellant's questions, and for this reason alone any

referral of the appellant's questions by the Board of its own motion is excluded.

6. *Suspension of the proceedings*

6.1 Decision T 166/84-*Postponement of examination/TAKEDA* (OJ EPO 1984, 489), to which the appellant has referred, states that whenever a decision of an examining division depends entirely on the outcome of the proceedings before the Enlarged Board of Appeal on a legal question or point of law raised according to Article 112 EPC 1973, the further examination must be suspended until the matter is decided by the Enlarged Board of Appeal.

6.2 In the introductory section of referral G 3/08, titled "Summary of the referral", the President of the EPO expresses concerns that some decisions of the Boards of Appeal have given too restrictive an interpretation of the breadth of the exclusion of computer programs in the EPC. Accordingly, the four questions referred to the Enlarged Board of Appeal only deal with various aspects of the exclusions from patentability under Article 52(2)(3) EPC 1973 (cf. the fourth paragraph of the Summary).

The Boards' approach to assessing the admissibility of amendments (Article 123(2) EPC) and the sufficiency of disclosure (Article 83 EPC 1973) is not questioned by the referral, neither in general nor in the field of computer-implemented inventions.

6.3 The appellant alleges that it is "clear" that the outcome of the present case depends on the Enlarged Board's answers to the questions in referral G 3/08. However, the appellant has not indicated which of the questions he considers to have a bearing on the present case.

6.4 Since the Board's judgement in the present case is based on Article 123(2) EPC and Article 83 EPC 1973 and, thus, does not depend at all on the outcome of the proceedings G 3/08 before the Enlarged Board of Appeal, there is no need to suspend the proceedings.

6.5 For these reasons, the appellant's (implicit) request for suspension of the proceedings is refused.

Order

For these reasons it is decided that:

The appeal is dismissed.

The registrar:

The chairman:

T. Buschek

S. Steinbrener