D E C I S I O N
of 9 October 2002

Case Number: T 0293/02 - 3.5.1
Application Number: 95115071.3
Publication Number: 0707406
IPC: H04M 3/42
Language of the proceedings: EN

Title of invention:
Integrated voice and business transaction reporting for telephone call centers

Applicant:
ROCKWELL INTERNATIONAL CORPORATION

Opponent:
-

Headword:
Transaction reporting/ROCKWELL

Relevant legal provisions:
EPC Art. 52(1), 56

Keyword:
"Inventive step (no)"

Decisions cited:
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Catchword:
-
Case Number: T 0293/02 - 3.5.1

DECISION
of the Technical Board of Appeal
of 9 October 2002

Appellant:
ROCKWELL INTERNATIONAL CORPORATION
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Downers Grove
Illinois 60515  (US)

Representative:
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Decision under appeal:
Decision of the Examining Division of the
European Patent Office posted 6 August 2001
refusing European patent application
No. 95 115 071.3 pursuant to Article 97(1) EPC.

Composition of the Board:
Chairman:  S. V. Steinbrener
Members:  A. S. Clelland
P. Mühlens
Summary of Facts and Submissions

I. European patent application No. 95 115 071.3 was refused by a decision of the examining division dated 6 August 2001 on the ground that the subject-matter of independent claims 1, 6 and 13 lacked an inventive step having regard to the disclosure of the following document:


II. The applicant appealed, requesting that the decision of the examining division be set aside and a patent granted. An auxiliary request was made for oral proceedings. In the statement of grounds of appeal the appellant argued that the examining division had interpreted D1 incorrectly and that there was no disclosure which would induce the skilled person to correlate business transaction and voice information data as was done in the application. A new set of claims was filed, including independent system and method claims.

III. In an annex to a summons to oral proceedings the Board raised issues of clarity and support under Article 84 EPC in respect of both independent claims. The Board additionally raised the question of whether the method claims related to excluded subject-matter within the meaning of Article 52(2) EPC. The Board took the preliminary view that D1 was highly relevant to the question of inventive step and observed that the automation of operations formerly performed manually was a well-known aim of industry. Attention was drawn to the technique of object linking and embedding, which was stated to have been common general knowledge in the
computer art at the claimed priority date.

IV. In response, the appellant submitted revised claims to replace those previously on file.

V. Oral proceedings took place on the 9th October 2002. In the course of the oral proceedings the appellant amended claim 6, the independent method claim, in order to overcome an objection that the subject-matter of the claim was not technical and therefore gave rise to objection under Article 52(2) EPC. The appellant argued that the invention was concerned with correlating data from two entirely different environments, namely voice data and business transaction data. The former arose from a telephone call from a customer and included, for example, the caller's telephone number, the dialled telephone number, the call queuing time and the duration of the call. The latter recorded sales, reservations and the like. The prior art nowhere suggested combining such disparate systems to give data in real time for use in the running of a call centre. The correlation of different data streams in real time was clearly a technical problem, and was different from the technique of object linking and embedding referred to by the Board. In object linking and embedding a stand-alone PC was enabled to combine data from two disparate programs in a single display or print-out, but the data consisted of two independent and juxtaposed sets of data rather than real-time correlated data. The cited technique did not permit data from two entirely different systems, running on different machines with different operating systems, to be correlated in real time. D1 moreover was exclusively concerned with the storage and processing of what the application referred to as voice data; it did not
disclose a computer for correlating the voice information and business transaction data in real time and for generating a written report containing the correlated voice information and business transaction data in real time.

VI. The appellant requested that the decision under appeal be set aside and that a patent be granted on the basis of claims 1 to 5, 7 to 13 as filed with the letter dated 4 September 2002, claim 6 as filed at the oral proceedings.

VII. Claim 1 reads as follows:

"An integrated voice and data business transaction detail reporting system for a call center of a telephone system, comprising:

an automatic call distributor (14) for directing incoming calls to a plurality of agents (16) and for generating voice information constituted by information pertaining to the voice of the calls;

a host computer (26) for supplying information to the agents (16), and for generating business transaction data pertaining to the incoming calls and to the action of the agents; and characterized by a computer (26; 14; 24) for correlating the voice information and business transaction data in real time and for generating a written report containing the correlated voice information and business transaction data in real time".

Claim 6, as amended in the course of the oral
proceedings, reads as follows:

"A method for reporting voice information constituted by information pertaining to the voice of incoming telephone calls and business transaction data pertaining to the incoming calls routed by an automatic call distributor (14), the method comprising the steps of:

processing the voice information and assigning a time to events defining a portion of the voice information;

processing the business transaction data and assigning a time to events defining a portion of the business transaction data;

characterized by having a computer correlate the voice information and the business transaction data in real time utilizing the time assigned to each said event;

and reporting the correlated voice information and business transaction data."

VIII. At the end of the oral proceeding the chairman closed the debate and announced the Board's decision.

**Reasons for the Decision**

1. **Admissibility of the appeal.**

The appeal satisfies the requirements mentioned in Rule 65(1) EPC and is consequently admissible.
2. **Technical background**

2.1 Telephone call centres are a well-known feature of modern life and generate two separate kinds of data; on the one hand there is the data generated by the call itself, for example the calling number and the number being called, as well as time data such as the length of time the call has been queued before being answered and the time taken by staff to deal with the call once answered. According to the appellant, such call data is referred to as "voice information" in the claims. On the other hand, there is the content of the call: a customer sale, a reservation or a complaint are three examples given in the application. The claims refer to the call content as "business transaction data". Since the two systems are separate and generate separate data streams, the problem arises of matching the call data to the content data so as to improve the management of the call centre (see column 1, lines 5 to 25). The application is said to provide an integrated voice and data business transaction detail reporting system for a call centre of a telephone system, as well as a corresponding method for reporting voice information and business transaction data. An advantage is said to be that better informed management decisions may be based upon significantly increased information, a further advantage being that a report may be formed in a simplified and rapid manner (see column 2, lines 6 to 12).

2.2 It was accepted by the appellant that D1 was the single most relevant prior art document. D1 relates to a call centre in which the number of an incoming call is matched to stored customer information so that when an agent answers the call the customer information is
simultaneously displayed. It was not contested by the appellant that D1 discloses the features of the preamble of claim 1, namely an integrated voice and data business transaction detail reporting system for a call center of a telephone system, comprising an automatic call distributor (CBX 1 in Figure 1 of D1) for directing incoming calls to a plurality of agents (4, 6 in Figure 1) and for generating voice information constituted by information pertaining to the voice of the calls, together with a host computer (3 in Figure 1) for supplying information to the agents and for generating business transaction data pertaining to the incoming calls and to the action of the agents.

3. **Inventive step**

3.1 The appellant amended claim 6 in the course of the oral proceedings to overcome an objection under Article 52(2) EPC that the claimed method was a method of doing business *per se*; the primary issue discussed in oral proceedings was therefore the question of inventive step.

3.2 D1 discloses a call centre having the features of the preamble of claim 1, see point 2.2 above. It appears to the Board that the host computer stores not merely information relating to the call itself, ie "voice information" or call data, but also details of the transaction between the caller and the agent. Thus, page 2 lines 20 to 25 refers to the display terminal providing "a useful repository of information" for the agent, examples being given of a current quotation on a stock portfolio or information on other possible investments; the existing stock information is said to be accessible by way of a host database and retainable
on the screen so that if the call were to be transferred to a broker in the event of an order being placed for additional stock, the existing stock information would be displayed to the broker as soon as the call was transferred. Inasmuch as information from the call is used to search for business data it appears to the Board that in D1 the host computer is used to correlate the call data and business transaction data in real time. The Board notes that in accordance with claims 2 and 3 of the application the computer which performs the correlation can be either the host computer or the automatic call distributor.

3.3 The appellant argued that D1 did not provide correlated information but was exclusively concerned with the call data. The Board does not agree. In addition to the passages quoted at point 3.2 above, D1 states at page 2, lines 26 and 27 that "the coordination of the phone and display terminal has not been handled effectively in the prior art" and at lines 50 and 51 that an object of the invention is "to provide a method of effecting and coordinating the transfer of telephone calls and separate host based information related to a call". An example given in D1 is the transfer of a caller from one agent to another. At page 16 lines 5 to 26 it is stated that if the caller requests additional services that require the help of another agent then the agent can transfer the caller using the standard call transfer feature of the phone and, if an agent is available, the host computer transfers the terminal transaction associated with the previous terminal to the new terminal so that the customer data is displayed as the phone is ringing. It is stated that "The agent is now fully prepared to deal with the customer without having to ask the customer for
information that has already been conveyed to the first agent". This shows that the display is not merely of call data but also business transaction data, the two being correlated on the display screen.

3.4 Thus, D1 discloses all features of claim 1 of the application, apart from the generation of a written report containing correlated "voice information" or call data and business transaction data in real time. The Board would observe that in D1, printing out the screen of the information available to the agent arguably fulfils this requirement. Be that as it may, the appellant argued that this feature implies the processing of data in such a way as to derive desired information in order to enable more efficient management of a call centre. The claim however does not clearly state this; it is not even wholly clear what is to be understood by the "voice information" and business transaction data being "correlated", but insofar as the term can be understood the Board takes the view that presenting both kinds of data on a display provides "correlated" data.

The Board accordingly concludes that the skilled person, given the disclosure of D1, would find it obvious for management purposes to print out the "correlated" data and thus produce a written report containing the displayed information.

3.5 Moreover, even without taking D1 into account, it appears self-evident to the Board that a company taking a telephone order would as a matter of course record the time and date of the call, the actual order, the caller's phone number, and indeed any other available data. Whereas such data might previously have been
recorded - in real time - by means of a pencil and paper, given that the automation of operations formerly performed manually is a well known aim of industry, no invention can be involved in conventionally recording such data - in real time - by means of a computer and thereafter printing it out.

3.6 The Board accordingly concludes that the subject-matter of claim 1 of the main request lacks an inventive step having regard to the disclosure of D1.

4. Claim 6 is an independent method claim having features corresponding in substance to those of claim 1 and is therefore open to the same objection of lack of inventive step as claim 1.

5. There being no allowable request, it follows that the application must be refused.

Order

For these reasons it is decided that:

The appeal is dismissed.

The Registrar: The Chairman:

M. Kiehl S. V. Steinbrener