DECISION
of 8 February 2002

Case Number: T 0258/97 - 3.5.1
Application Number: 89307768.5
Publication Number: 0354702
IPC: H04N 1/32

Language of the proceedings: EN

Title of invention:
Image communication apparatus

Applicant:
CANON KABUSHIKI KAISHA

Opponent:
-

Headword:
Multi-address call/CANON

Relevant legal provisions:
EPC Art. 56

Keyword:
"Inventive step (no)"

Decisions cited:
T 0027/97

Catchword:
The assessment of inventive step can only be based on the elements and aspects of the invention in respect to which a technical effect can be established. Whether an invention causes a technical effect is essentially a question of fact. While the EPO has a duty to determine such facts in examination proceedings, the onus is upon the applicant to cooperate in said determination, in particular in the event of doubt (see point 7 of the Reasons for the Decision).
Case Number: T 0258/97 - 3.5.1

DECISION
of the Technical Board of Appeal 3.5.1
of 8 February 2002

Appellant: CANON KABUSHIKI KAISHA
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Representative: Beresford, Keith Denis Lewis
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Decision under appeal: Decision of the Examining Division of the European Patent Office posted 10 October 1996 refusing European patent application No. 89 307 768.5 pursuant to Article 97(1) EPC.

Composition of the Board:
Chairman: S. V. Steinbrener
Members: R. R. K. Zimmermann
P. Muehlens
Summary of Facts and Submissions

I. European patent application No. 89 307 768.5 (publication No. 0 354 702) was filed by the appellant and relates to an invention in the field of data communication systems, for which the application claims 12 August 1988 as date of priority.

II. The examining division raised objections against the application on the basis of the prior art document EP-A-0 244 869 (published in 1987 and cited as document D2). The application was then refused for lack of inventive step in a decision posted on 10 October 1996.

III. The appellant filed a notice of appeal on 10 December 1996, requesting reversal of the decision and grant of the patent; payment of the appeal fee was effected the same day. A written statement setting out the grounds of appeal was filed on 19 February 1997.

IV. Subsequent to a communication by the Board, the appellant filed amended claims and an amended page of the description on 20 July 2001, with claim 1 reading as follows:

"A data communication apparatus comprising:
multi-address call means (1, 3, 4, 31, 32), having a plurality of multi-address call modes including at least a first multi-address call mode and a second multi-address call mode, for transmitting data to a plurality of designated destinations,
wherein in the first multi-address call mode, each of the said plurality of designated destinations is called in turn for transmitting the data, and if a connection is not made to a designated destination the designated destination is called again after all of the plurality
of designated destinations have been called, and in the second multi-address call mode, the plurality of designated destinations are divided into a plurality of groups such that a plurality, but not all, of the designated destinations belong to the same group and each designated destination is called in a group in turn for transmitting the data, and if a connection is not made to a designated destination, the designated destination is called again after all the designated destinations in its group have been called but before moving on to the next group; setting means (14), responsive to an input from a user or from the service personnel, to set a predetermined number of destinations per group for dividing the plurality of destinations into a number of groups; and control means (1, 31) to divide the plurality of designated destinations into one or more groups each having the set predetermined number of designated destinations per group, and to execute the first multi-address call mode if the number of groups resulting from division is one, and to execute the second multi-address call mode if the number of groups resulting from the division is two or more."

V. With summons to oral proceedings, the Board communicated to the appellant its doubts regarding patentability of the invention, indicating that apart from an abstract scheme of defining alternative recall patterns the claimed invention did not provide any inventive contribution to the prior art.

In a written reply, the appellant's representatives announced that they would not appear at the hearing; the oral proceedings might be cancelled.

In the absence of the appellant and its representatives the oral proceedings took place as scheduled. After deliberation the Board announced the decision, taking
the appellant's requests into consideration to reverse the decision under appeal and to grant a patent on the basis of the claims filed on 20 July 2001.

VI. The arguments submitted by the appellant in writing are summarized as follows:

It was not derivable in any obvious manner from document D2 that the user or the service personnel should be enabled to select between various multi-address call modes for data transmission, a feature whose implementation involved more than automating the one-touch dial keying of broadcast or polling groups disclosed in this document. The invention addressed the problem that operating only in a single multi-address call mode did not always suit communications traffic conditions. In the case of a small number of designated destinations, for example, an all-destination multi-address call mode was appropriate to be used, whereas in other cases with a larger number of destinations a group-destination multi-address call mode would do better in communications efficiency. The operating conditions could be met by allowing the selection of the appropriate multi-address call mode; adding such a functionality to a facsimile apparatus was an inventive contribution to the prior art.

Reasons for the Decision

1. The appeal is admissible.

2. The appeal is not allowable, however, since the invention as claimed is, in terms of Articles 52(1) and 56 EPC, not patentable for lack of inventive step.
Article 56 EPC determines that an invention involves inventive step if, having regard to the prior art, it is not obvious to a person skilled in the art. The Board considers appropriate to construe and apply this definition on the basis of the problem-solution approach as developed in earlier decisions of the boards of appeal (see also the publication of the EPO "Case Law of the Boards of Appeal of the European Patent Office, 4th edition 2001", pages 101 f.).

3. An appropriate starting point for examining inventive step is prior art document D2, which discloses a facsimile apparatus operating in a broadcast mode and a polling mode. In both operating modes the apparatus performs a multi-address call by dialling sequentially through a prepared group of telephone numbers which are stored in a RAM 55 (see Figures 5 f.).

The facsimile apparatus also provides a redialling or recall function for automatically redialling, in a multi-address call, failed or for other reasons missed connections. The dialling and redialling of the telephone numbers follows a simple recall pattern which consists in retrying the failed connections after all telephone numbers associated with a selected multi-address group have been dialled (see page 10, line 29 to page 11, line 15 for the broadcasting mode and page 11, line 26 to page 12, line 14 for the polling mode). This redialling scheme is the same for all broadcast and polling groups; it should not be mistaken for the one-touch dial key function allowing designating one of this groups for data transmission.

The present claims use the term "plurality of designated destinations" in a sense which may include a group of addresses as well as a list of telephone numbers (see for example column 3, lines 33 f. of the published application). Document D2 thus anticipates
the operating mode denoted, in the present application, as the "first multi-address call mode" using the same simple recall pattern as proposed in document D2 (see the third paragraph of claim 1 and, for example, column 1, lines 18 ff. of the published application). However, document D2 does not address the use of alternative recall patterns, the core of the present invention.

4. Hence, the claimed subject matter differs from the prior art in that the apparatus comprises "setting means, responsive to an input from a user or from service personnel, to set a predetermined number of destinations per group" for defining the dialling and redialling scheme, and "control means" for executing the specific dialling and redialling process.

Inherent in these features are an abstract algorithm for manually defining a scheme for looping through a group of numbers and its technical implementation by means of the setting and control means.

5. However, an abstract algorithm is relevant to inventive step only if a technical effect can be established which is causally linked to the algorithm, providing a contribution to the solution of a technical problem and conferring, in this sense, "technical character" to the algorithm (see T 27/97 Cryptographie à clés publiques/ FRANCE TELECOM, not published in OJ EPO).

6. Changing the dialling and redialling sequence by setting manually the number of destinations per group physically changes the operation of the apparatus and thus indisputably causes a physical effect. It is doubtful, however, whether changing the sequence has any technical effect, i.e. a physical effect which is purposively used in the solution of a technical problem.
In its written submissions the appellant referred to alleged improvements in the interoperability and communications efficiency. This argument has indeed a basis in the description which identifies as a "conventional problem" in the prior art that "only one multi-address call scheme is set" and the conventional facsimile apparatus "can be used within only a corresponding delivery destination". Employing only one multi-address call scheme, the description indicates, the apparatus "cannot always perform an efficient multi-address call" (see column 1, lines 37 ff. of the published application).

The Board, however, is not aware of any interoperability or compatibility problem caused by differing redialling schemes. Neither did the appellant submit any plausible technical reasons for that kind of improvements.

Regarding communications efficiency, the Board considers beneficial effects indeed as possible, but only if there are some rules given to the user when and under which traffic conditions the one or the other recall pattern should be selected. The vague criterion of serving a greater or lesser number of designated designations is not accepted as a reasonable rule for this purpose. Other rules, however, are not derivable from the patent application, nor is the Board aware of any general technical knowledge which may close this information gap.

7. Whether an invention causes a technical effect is essentially a question of fact. While the EPO has a duty to determine such facts in examination proceedings, the onus is upon the applicant to cooperate in said determination, in particular in the event of doubt.
In the present case, the appellant has not made any attempt to dispel the Board's doubts. Under these circumstances, the alleged improvements cannot be accepted as the result of any technical effects of the invention and, hence, cannot be given any weight in assessing inventive step.

8. This leaves, as the only relevant aspect of the claimed invention, the technical implementation of the dialling and redialling scheme. The implementation, however, is claimed in terms which, from a technical viewpoint, do not define more than normal input and control means. The skilled person would regard their use as obvious in view of the fact that such type of means are used in all kind of processor-controlled systems.

9. For these reasons the claimed invention lacks inventive step (Articles 52(1) and 56 EPC), with the consequence that the appeal cannot be allowed.

Order

For these reasons it is decided that:

The appeal is dismissed.

The Registrar: The Chairman:

M. Kiehl S. V. Steinbrener