DECISION
of 7 May 2003

Case Number: T 0289/01 - 3.5.1
Application Number: 95304293.4
Publication Number: 0689342
IPC: H04N 1/417, H04N 1/32
Language of the proceedings: EN
Title of invention: Image information transmitting method and apparatus
Applicant: CANON KABUSHIKI KAISHA
Opponent: -
Headword: Image transmitting apparatus/CANON
Relevant legal provisions: EPC Art. 54, 56, 84
Keyword: "Novelty (main request - no)"
"Inventive step (auxiliary request 1 to 5 - no)"
Decisions cited: -
Catchword: -
Case Number: T 0289/01 - 3.5.1

DECISION
of the Technical Board of Appeal 3.5.1
of 7 May 2003

Appellant: CANON KABUSHIKI KAISHA
(Applicant)
30-2, 3-chome, Shimomaruko
Ohta-ku,
Tokyo (JP)

Representative: Beresford, Keith Denis Lewis
BERESFORD & Co.
2-5 Warwick Court
High Holborn,
London WC1R 5DH (GB)

Decision under appeal: Decision of the Examining Division of the
European Patent Office posted 26 September 2000
refusing European application No. 95304293.4
pursuant to Article 97(1) EPC.

Composition of the Board:
Chairman: S. V. Steinbrener
Members: R. S. Wibergh
E. Lachacinski
Summary of Facts and Submissions

I. This appeal is against the decision of the Examining Division to refuse European patent application No. 95 304 293.4.

II. The following documents will be referred to in the present decision:


III. According to the contested decision the invention in the form then claimed was not new over the prior art known from document D2.

IV. Together with the grounds of appeal the appellant (applicant) filed new claims 1-35 and requested that a patent be granted on the basis of these claims.

V. In a communication from the Board the opinion was expressed that, depending on the interpretation of the independent claims, the apparatus according to claim 1 and the method according to claim 20 appeared either not to be new with respect to D1, which document was now regarded as closest, or not to involve an inventive step.

VI. With letter dated 7 April 2003 the appellant filed independent claims according to a main request and three auxiliary requests.
Claim 1 of the main request read:

"Image communication apparatus comprising:

memory means (3) for storing image data representing an image; reception means (7) for receiving image data from another communication apparatus;

combination means (9) adapted to retrieve image data from the image data stored by said memory means and to combine the received image data with the retrieved image data;

storage means (S12) for storing the combined image data in said memory means in such a manner that the previously stored image data is updated to the combined image data; and

output means (11) for generating output signals which represent the combined image data;

characterised in that the apparatus includes
determination means (8) for determining whether or not the received image data represents difference information which indicates differences between an image and an image which is stored in said memory means, based on identification information included in the received image data; and the combination means (9) is adapted to combine the received image data with the retrieved image data if the determination means (8) determines that the received image data indicates difference information identified by the identification information".

Claim 1 of auxiliary request 1 added to the main request " and input means (1,801) for inputting image data separate from said reception means".
Claim 1 of **auxiliary request 2** further added to auxiliary request 1 "calculation means (4) for calculating difference image information input by said input means and original image data stored in said memory means; and transmissions means (6) for transmitting the difference image information calculated by said calculation means".

Claim 1 of **auxiliary request 3** further added to auxiliary request 2" and second detection means (2) for detecting identification information in the input image data which indicates that image data input by said input means is difference information with respect to original image data, wherein said calculation means is adapted to calculate the difference image information in accordance with the identification information".

For each request there was also a corresponding independent method claim 20.

**VII.** Oral proceedings were held on 7 May 2003. The appellant submitted two additional auxiliary requests:

**Auxiliary request 4** was based on auxiliary request 2 with the limitations that the claimed apparatus "is a facsimile apparatus" and the input means "a scanner". The transmission of the difference image information is "by facsimile".

**Auxiliary request 5** was based on auxiliary request 3 and contained the same limitations as the previous request.
VIII. The appellant requested that the decision under appeal be set aside and a patent be granted on the basis of the main request or alternatively first to third auxiliary requests submitted with letter of 7 April 2003 or fourth and fifth auxiliary requests submitted during the oral proceedings.

IX. At the end of the oral proceedings the Board announced its decision.

Reasons for the Decision

1. Prior art

1.1 D1 (page 844) discloses a method for transmitting data between terminals of a network. Documents to be sent are divided into a form part and a content part associated with a form ID and a content ID, respectively. For every form the originating (transmitting) processor remembers the last transmission request and the current transmission request. On the receiving side the processor remembers at least the most recent transmission for every document form. If a previously transmitted form is to be sent with new content only the content is transmitted. The receiving processor combines the new content with the old form (page 845, option Y,N). Since D1 is concerned with electronical documents rather than faxes there is no scanning of paper documents.

D2 (see eg the abstract, claim 1 and figure 4) describes a facsimile transmission of a record of delivery. The record is first scanned and then split up, eg electronically, into fixed data (the form) and
variable data (e.g. address, date, signature). Only the variable data are transmitted. The receiving fax machine adds the invariable form to the received data and displays or prints out the combination, which corresponds to the scanned record of delivery.

Main request

2. **Clarity and interpretation of claim 1**

2.1 The "determination means" in claim 1 are for "determining whether or not the received image data represents difference information which indicates differences between an image and an image which is stored in said memory means, based on identification information included in the received image data". The appellant has argued that the "identification information" corresponds to the "identification pattern" mentioned in the description. This pattern may consist of characters or a bar code and is added by the receiver to the print-out (cf column 6, lines 22 to 37 of the published application). Thus, as the appellant interprets claim 1, the claimed communication apparatus (receiver) must be capable of identifying such a pattern, as shown in box S3 in figure 5.

The Board is however doubtful if the skilled person would necessarily understand claim 1 in this way. The claim is in fact not restricted to identification information being a (printed) pattern. Any "identification information" included in the "received image data" is covered. Similarly, the expression "image data" is not regarded as clearly limited to the data corresponding to the image actually to be printed.
but is at some instances in the patent application used collectively for all the received data, including control data. One example is column 7, lines 22 to 27: "When image data is received by a receiving-side facsimile apparatus, the information is sequentially stored into the image buffer... Then, whether or not the initial DCS signal includes an identification code as an optional code is determined". This seems to imply that the DCS signal, which according to figure 3A is a protocol signal, is regarded as part of the "received image data", an interpretation which is consistent with the fact that the described apparatus is capable of determining whether or not the received data are differential data also on the basis of an "identification code" contained in the DCS signal (cf figure 3B; box S2 in figure 5). Thus the "identification information" in claim 1 is not necessarily a printed pattern but could also be the (electronical) "identification code".

2.2 Furthermore, the expression "difference information" could either refer to the general technique of sending data as updates whenever this is possible, ie a "differential" mode of operation as opposed to conventional fax operation, or alternatively to information which actually represents a difference between two images. (Even in the "differential" mode some information - such as an initial message - is transmitted in full.) The first reading, which the appellant submits is the correct one, is supported by the description at column 7, lines 37 to 43. However, the second reading is consistent with other parts of the description (column 7, lines 50 to 58) as well as with (original) claim 5. Claim 1 is therefore ambiguous
on this point (cf Article 84 EPC) and its subject-matter cannot be said to be limited to one or the other possibility.

3. **Novelty**

3.1 As acknowledged by the appellant, D1 discloses the preamble of claim 1. It is furthermore explained in D1 that a receiving processor can determine if incoming data represent an update of a previously received image stored in its memory (i.e., if the data are "differential information" in the second sense mentioned in the preceding paragraph). This determination is based on ID signals sent from the originating processor, which signals can therefore be regarded as "identification information included in the received image data" (where the expression "image data" is interpreted in a wide sense, cf paragraph 2.1 above). Thus the determination means of claim 1 are regarded as known from D1. The document also discloses combination means for combining received data with data retrieved from memory (page 846, point 5).

3.2 Thus, the subject-matter of claim 1 lacks novelty over D1 (Article 54 EPC).

**Auxiliary request 1**

4. According to auxiliary request 1 the claimed apparatus additionally comprises input means (for example a scanner), separate from the reception means, for inputting image data. In D1 an input means is present in the transmitting terminals, viz. the application program which provides the originating processor with
the information to be transmitted. The appellant has pointed out that D1 does not disclose that a receiving terminal processor can transmit data, so that it is questionable if any terminal contains both reception means and input means. However, since D1 deals with a number of networked terminals which are not otherwise described as different from each other the assumption that a receiving processor is also able to transmit is only natural.

Thus the subject-matter of claim 1 lacks an inventive step over D1 (Article 56 EPC).

**Auxiliary request 2**

5. Claim 1 additionally sets out calculation means for calculating difference image information input by said input means and original image data stored in said memory means, and transmission means for transmitting the difference image information calculated by said calculation means. In the Board's opinion these means are disclosed in D1. The goal in D1 is to transmit changes rather than complete documents, as witnessed by the title "Method for transmitting only document change data" and other passages (eg in the second paragraph of page 844: "This invention... is most useful... if there may be small changes between subsequent versions of the same content"; "...only the change need be transmitted"). In order to transmit changes the difference between the new and the old version of a document must be found. Therefore, even if calculation means are not explicitly mentioned in D1 they are implied by the effect achieved and by the fact that the originating processor remembers, for every distinct
form, "the last transmission request and the current transmission request" (cf. D1, page 844, end of third paragraph). Furthermore, clearly also transmission means must be present.

Thus also the subject-matter of this claim does not involve an inventive step.

**Auxiliary request 3**

6. Claim 1 of this request adds second detection means for detecting identification information in the input image data which indicates that image data input by said input means is difference information with respect to original image data. (Here the word "second" should be deleted, as confirmed by the appellant at the oral proceedings before the Board.) It is also specified that the calculation means is adapted to calculate the difference image information in accordance with the identification information.

7. Since according to D1 "only the changes are sent" the originating processor must contain detection means for recognising a new version of an already stored document. As already noted in paragraph 5 above, there must also be calculation means for calculating the difference between the new and stored versions. Thus this request cannot be allowed (Article 56 EPC).

**Auxiliary request 4**

8. Auxiliary request 4 corresponds to auxiliary request 2, but with two further limitations: the apparatus is a fax machine, and the input means is a scanner.
9. D1 does not describe facsimile devices but terminals. Claim 1 is therefore further distinguished from this prior art in that documents are not created by an application program but entered by means of a scanner.

The technical problem can be seen in extending the known system's capabilities so that the documents transmitted are not necessarily created with an application program. The solution consists in using a scanner as input means. Merely adding a scanner to a computer system would normally be regarded as obvious since, as acknowledged also in the present application (column 1, second paragraph), facsimile apparatus were generally known and widely used at the priority date. There seems to be no good reason why the skilled person would have refrained from adding a scanner to the particular network shown in D1. On the contrary, it would clearly be a useful addition and fit well into the technical concept in D1: also a scanned document (even if in the form of a bit map) can be regarded as consisting of a form and a content, as shown by D2 where a scanned record of delivery is split electronically into fixed and variable data; moreover, an application program might use scanned data as input (e.g., by means of character recognition) to produce a document whose content and form are subsequently transmitted in the way described in D1.

It therefore appears that the addition of a scanner to permit the terminal network described in D1 to transmit faxes was an obvious measure. It follows that auxiliary request 4 cannot be allowed (Article 56 EPC).
Auxiliary request 5

10. According to this request the detection means detects identification information in the input image data which indicates that image data input by the scanner is difference information. This implies that the identification information is a (visible) pattern. Although D1 does not disclose the use of a pattern this appears to be a straight-forward solution to the problem of indicating the required form ID and content ID if the originating processor in D1 is to accept documents from a scanner as well as from an application program.

Therefore this request cannot be granted for lack of inventive step (Article 56 EPC).

Order

For these reasons it is decided that:

The appeal is dismissed.

The Registrar: The Chairman:

M. Kiehl S. V. Steinbrener