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Datasheet for the decision of 20 March 2012

Case Number: T 0303/08 - 3.5.05

Application Number: 98112171.8

Publication Number: 889389

IPC: G06F 3/12

Language of the proceedings: EN

Title of invention:
Printing control apparatus and method

Applicant:
CANON KABUSHIKI KAISHA

Headword:
Per-copy printing apparatus and method/CANON

Relevant legal provisions:
EPC Art. 123(2)

Relevant legal provisions (EPC 1973):
EPC Art. 56, 84

Keyword:
"Clarity of claims - yes (after amendment)"
"Extension of subject-matter - no"
"Remittal for further prosecution - (yes)"

Decisions cited:
-

Catchword:
-

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Case Number: T 0303/08 - 3.5.05

D E C I S I O N
of the Technical Board of Appeal 3.5.05
of 20 March 2012

Appellant: (Applicant)
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Decision under appeal: **Decision of the Examining Division of the European Patent Office posted 30 August 2007 refusing European application No. 98112171.8 pursuant to Article 97(1) EPC 1973.**

Composition of the Board:

Chairman: A. Ritzka
Members: P. Cretaine
G. Weiss

Summary of Facts and Submissions

I. This appeal is against the decision of the examining division, dispatched on 30 August 2007, refusing European patent application No. 98 112 171.8 on the grounds of lack of inventive step (Article 56 EPC 1973) in the light of the following prior art document:

D1: US 4 099 254.

II. The notice of appeal was received on 30 October 2007. The appeal fee was paid on the same day. The statement setting out the grounds of appeal was received on 8 January 2008. The appellant requested that a patent be granted on the basis of the set of claims 1 to 11 submitted with the statement setting out the grounds of appeal. The further documents on which the appeal was based were as follows:

description pages:
1 to 3, 8 to 35 and 35a as originally filed,
4 as filed with letter of 22 August 1998,
5 as filed with letter of 12 June 2007;

drawings sheets:
1/12 to 12/12 as originally filed.

Oral proceedings were requested on an auxiliary basis.

III. A summons to oral proceedings to be held on 20 March 2012 was issued on 5 January 2012. In an annex accompanying the summons the board raised objections under Articles 84 EPC 1973 and 123(2) EPC against the amended claims. The board further expressed the

preliminary opinion that, even if the above-mentioned objections were overcome, the subject-matter of the claims did not appear to involve an inventive step in the light of the disclosure of D1 combined with

D2: US 5 495 561

cited by the examining division at the oral proceedings.

However, the board expressed doubts as to whether the novel features introduced by the amendments to the claims in appeal had been searched.

IV. By letter dated 7 February 2012 the appellant filed a set of claims 1 to 9, replacing the set of claims previously on file, and an amended page 5 of the description. The appellant also provided arguments in respect of inventive step.

V. At the oral proceedings held as scheduled on 20 March 2012, the appellant filed a set of amended claims 1 to 9, replacing the claims previously on file.

VI. The appellant has requested that the decision be set aside and that a patent be granted on the basis of claims 1 to 9 filed at oral proceedings.

VII. Claim 1 of the request reads as follows:

"A printing control apparatus (3000) working as a host computer connected to a printing apparatus (1500) which prints on front and reverse sides of a printing medium, comprising:

storage control means (302) for converting a print instruction issued by an application to an intermediate code, wherein the intermediate code is output to a spool file (303);

a despooler (305) for manipulating the intermediate code contained in the spool file (303) in accordance with print setting information;

setting and converting means (203) for setting the print setting information based on setting contents input to a setting screen, and converting the intermediate code manipulated by the despooler (305) into a print control command which can be interpreted by the printing apparatus;

judging means (304) for judging whether printing a plurality of copies, per-copy printing and double-sided printing are set by said setting means (203);

job generation means (304) for, when said judging means judges that the printing the plurality of copies, the per-copy printing and the double-sided printing are set, and the final page of the spool file constituting one copy is fallen on the front side of a printing medium, generating a single print job based on the content of the spool file (303), using a command to instruct the despooler to make a blank page on the reverse side of the printing medium; and

transmission means (204) for transmitting the print control command generated using the single print job generated by said job generation means and the despooler (305) to the printing apparatus (1500),

wherein said job generation means (304) is adapted to generate the single print job without using the command to make a blank page in a case where said judging means judges that at least one of the printing

the plurality of copies, the per-copy printing and the double-sided printing are not set, and

wherein said job generation means (304) is adapted to generate the single print job including from a first page to a last page for a designated number of copies."

The request includes further an independent claim (claim 7) seeking protection for a corresponding control method of a printing control apparatus.

VIII. At the end of the oral proceedings the chair announced the board's decision.

Reasons for the Decision

1. Admissibility

The appeal complies with Articles 106 to 108 EPC (see Facts and Submissions, point II above). It is therefore admissible.

2. Articles 84 EPC 1973 and 123(2) EPC.

The board is satisfied that the subject-matter of the claims of the appellant's request is clear and supported by the description (Article 84 EPC 1973), and that the amendments to the claims comply with the requirements of Article 123(2) EPC. In particular, the subject-matter of independent claims 1 and 7 finds support in the passage from column 7, line 40 to column 9, line 7, in combination with Figure 3 of the published application.

With respect to the denominations of the different data signals flowing through the diagram of Figure 3, which were the origin of the clarity and added-matter objections raised by the board in the annex to the summons to oral proceedings, the board is now satisfied that claim 1 clearly defines that, in accordance with the teachings of Figure 3 and the above-mentioned corresponding passage:

- the application (201, Figure 3) issues a **print instruction**;
- the **print instruction** is received by the storage control means (302) and converted into an **intermediate code**;
- the **intermediate code** is output to a spool file (303);
- the **intermediate code** contained in the spool file is converted by the job generation means (304) and the despooler (305), using print setting information set by the setting and converting means (203), into a **single print job;**
- the **single print job** is converted by the setting and converting means (203) into a **print control command** which is transmitted by the transmission means (204) to the printing apparatus.

3. Article 56 EPC 1973

3.1 Prior art

D1 represents the closest prior art on file. It discloses a control apparatus (see Figures 4, 6 and 10) for a printer able to print on the front and reverse side of a printing medium ("duplex mode"). Pages of a

document are read from a reading device 55 and stored in a floppy disc storage unit (FDSU) 115. If a duplex mode is set (see Duplex Key 460 in Figure 10), the odd and even numbered pages are stored in first and second sections of the FDSU 115 respectively; if the last page of the document falls in the first section of the FDSU, a blank page is created as the last page of the stored document in the second section of the FDSU. When all the pages of the document have been stored, printing of the document starts by using the content of the FDSU 115 (see Figure 6): the odd-numbered pages, stored in the first FDSU section, are first printed on paper sheets which are then sequentially stored in an interim storage unit; the stored paper sheets are then sequentially turned over for printing the even-numbered pages stored in the second section of the FDSU on the other side of the paper sheets. If more copies of the same document are required, the process is repeated, starting by reading again the content of the FDSU 115, thereby achieving a per-copy printing (see D1, column 7, line 43 to column 8, line 20).

3.2 A first difference between the subject-matter of claim 1 and the disclosure of D1 is that claim 1 is directed to a printing control apparatus working as a host computer connected to a printing apparatus, whereas D1 discloses a printing apparatus having printing control means. In that respect the board agrees with the argumentation of the impugned decision, which states in substance that separating identical functionalities between two entities, the printing apparatus and the printing control apparatus as it is the case in claim 1, lies within the general design competence of a skilled person. The board therefore

judges that this distinguishing feature cannot contribute to an inventive step of claim 1.

3.3 Taking into account the considerations expressed by the board in points 3.1 and 3.2, the main differences between the subject-matter of claim 1 and the disclosure of D1 are the following:

- the claimed printing control apparatus is adapted to generate and send to the printer a **single print job** corresponding to a plurality of copies of the same document, arranged on a per-copy basis, whereas the system of D1 is only adapted for sending pages one by one to the printer;

- the claimed printing control apparatus is adapted to apply print settings to a document to be printed, **after said document has been stored**, whereas the system of D1 applies a double-sided setting while the document is being stored.

The technical problem underlying these differences is to reduce the printing processing load for an application.

3.4 Document D2 relates to a printing control apparatus working as a host computer connected to a printing apparatus (see Figure 4). D2 discloses an object-oriented printing interface (424, Figure 4) capable of paginating printable information received from an application program (402, Figure 4) in several different formats before the printable information is sent to a printer handler (414, Figure 4) for converting it to printer command (see column 9, lines

24 to 35). D2 mentions that the advantage of having such a printing control scheme is that the application does not need to have a built-in document formatting capability and is thus freed from printing processing after the printable information has been issued to the printing interface (see from column 3, line 58 to column 4, line 10 and column 10, lines 23 to 34). However, D2 does not disclose the generation of a single print job corresponding to a plurality of copies of the same document, arranged on a per-copy basis. Combining the teaching of D2 with the disclosure of D1 would thus not lead to the subject-matter of claim 1. Moreover, in the board's judgement, the skilled person would not even consider such a combination, due to the differences in the technologies involved, hardware-based circuitry in D1 and object-oriented programming in D2, which is also reflected by the large time lag between the filing dates of these two documents.

3.5 The board notes that the distinguishing features mentioned in point 3.3 above have not been claimed in the application as originally filed. Moreover, these features as such and the technical effects they involve have not been addressed at all by the examining division in the course of the examination procedure. Document D2 was introduced by the examining division at a later stage in the oral proceedings with the single aim of showing N-up printing capabilities.

Under these circumstances, the board doubts whether the above-mentioned features have been fully searched, in order for the inventive step requirement to be decided in a definitive manner in the context of the present appeal proceedings.

3.6 Accordingly, the board has decided to exercise its discretion under Article 111(1) EPC to remit the case to the department of first instance for further prosecution.

Order

For these reasons it is decided that:

1. The decision under appeal is set aside.

2. The case is remitted to the department of first instance for further prosecution.

The Registrar: The Chair:

K. Götz A. Ritzka