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**Datasheet for the decision
of 10 December 2012**

Case Number: T 2192/08 - 3.5.01
Application Number: 02256095.7
Publication Number: 1296267
IPC: G06F17/60
Language of the proceedings: EN

Title of invention:

Information processing apparatus, consumables stock management system, consumables stock managing method, consumables stock managing program, and memory medium

Applicant:

CANON KABUSHIKI KAISHA

Headword:

Stock management/CANON

Relevant legal provisions:

EPC 1973 Art. 56

Keyword:

Inventive step - (yes)



Beschwerdekammern
Boards of Appeal
Chambres de recours

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Case Number: T 2192/08 - 3.5.01

D E C I S I O N
of the Technical Board of Appeal 3.5.01
of 10 December 2012

Appellant: CANON KABUSHIKI KAISHA
(Applicant) 30-2, 3-chome, Shimomaruko,
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Representative: Hitching, Peter Matthew
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Decision under appeal: **Decision of the Examining Division of the
European Patent Office posted 1 July 2008
refusing European patent application No.
02256095.7 pursuant to Article 97(2) EPC.**

Composition of the Board:

Chairman: S. Wibergh
Members: P. Scriven
P. Schmitz

Summary of Facts and Submissions

- I. The appeal is against the Examining Division's decision to refuse European patent application 02256095.7, on the grounds that there was a lack of inventive step.
- II. With the statement setting out the grounds of appeal, the appellant filed new main and first and second auxiliary requests, and a further auxiliary request that oral proceedings be held.
- III. In a communication pursuant to Rule 100(2) EPC, the Board informed the appellant of its provisional opinion: none of the requests complied with Article 123(2) EPC, but, in claim 1 according to the main request, the appellant seemed to be attempting to define subject matter which did involve an inventive step.
- IV. With the letter of reply, the appellant withdrew the auxiliary requests, and filed an amended version of the main request.
- V. The Board arranged for oral proceedings to be held, and summoned the appellant accordingly. In an accompanying communication, the Board set out its provisional opinion regarding the main request: claim 1 was unclear in a number of respects, but clarification seemed possible and it might be possible to reach a decision without holding oral proceedings.
- VI. With a second letter of reply, the appellant filed an amended set of claims.
- VII. The rapporteur and the appellant's representative discussed issues of clarity in the independent claims, during a telephone conversation.

VIII. By letter dated 11 October 2012, the appellant filed further amendments to the claims. Claim 1 reads as follows.

An information processing apparatus for enabling management of a stock number of a consumable, in the form of a cartridge containing ink or toner, detachably placed in a printing apparatus by referring to a count of the number of print sheets or a pixel count number from the printing apparatus, characterized by comprising: determining means (201) for determining that a current notification of a residual amount of the consumable is to be used to decrease the stock number of the consumable if the count of the number of print sheets or pixel count number has changed by at least a predetermined amount in a period between the previous notification of the residual amount of the consumable and the current notification, the previous and current notifications either both indicating the residual amount becoming low, or both indicating that the residual amount is no longer low; and control means for controlling stock management such that, if the determining means (201) determines that the current notification is to be used to decrease the stock number, the stock number is decreased by one, whereas the stock number is not decreased if the determining means (201) does not determine that the current notification is to be used to decrease the stock number.

IX. The Board cancelled oral proceedings.

Reasons for the Decision

1. The invention concerns a stock-keeping function in a printer. The printer keeps track of the number of toner or ink cartridges in stock, reducing the number automatically when a cartridge is changed. In prior art systems, such as set out in paragraphs [0002] - [0003] of the published application, or in document D1 (EP-A-0 715 221), the printer produces a signal when the cartridge is empty, and that signal triggers the decrement of the stock count.
2. The appellant has identified a problem with that. A user of the printer might remove the cartridge, and then put it back, rather than replacing it with another. In particular, a user might shake the cartridge and put it back. That sometimes allows the cartridge to be used for longer. If that happens, the automatic stock count is decremented, but the actual stock situation has not changed.
3. The invention, as defined in claims 1 and 8, addresses that problem. The stock count is not automatically decremented when there is an empty signal. Rather, a measure of how much use the cartridge has had between consecutive empty signals is used. If, after an empty signal, a cartridge is only used a little before the next empty signal is produced, then that is taken to indicate that a new cartridge was not used, but that the old one was put back, and the stock count is not decremented. As indications of how much use a cartridge has had, either the number of printed sheets or the number of printed pixels is used. Neither the check on cartridge use, nor either of the two alternative ways of assessing it, is part of the prior art.
4. The Examining Division considered that such checks on cartridge use would have been obvious to the skilled person. Firstly, as the application states, it was "generally known

that by once removing the cartridge from the printing apparatus and shaking it or the like, a state where the residual amount is temporarily recovered is detected or the like," (application as published, column 10, lines 38 - 42). Secondly, the use of the number of sheets or of printed pixels, as indications of cartridge use, were simple design options.

5. Despite the fact that cartridge shaking as such was generally known, the Board is not convinced that the underlying cause of inaccurate stock-keeping was known or obvious. Even a skilled person who knew that users sometimes shook and replaced cartridges might not have seen a connection with the stock-keeping problem. Thus, the identification of the technical problem was, in itself, a non-obvious step.
6. Moreover, nothing in the prior art suggests the proxy measures of cartridge use, defined in independent claims 1 and 8, could be used to indicate whether a cartridge had been replaced by a new one, or an old one had been re-placed in the printer. The Board cannot agree with the Examining Division that this amounts simply to a design option. Indeed, two steps have to be taken: firstly, the skilled person must decide that it is possible to distinguish between the placing of a new cartridge and the re-placing of an old one on the basis of how much printing takes place between consecutive signals; secondly, he must decide that the number of sheets or the number of pixels can be used as an indication. It might be arguable that, once the first of those steps has been taken, the second would be obvious; but the Board sees no indication that the first step itself would have been obvious.
7. Therefore, the apparatus defined in claim 1 and the corresponding method defined in claim 8, meet the requirement of inventive step (Article 56 EPC 1973).

8. Claims 1 and 8 are directed to the third embodiment set out in paragraphs [0078] - [0090] of the published application. The Board is satisfied that claims 1 and 8 correctly reflect the essential features of the third embodiment, and are, therefore, based on the application as originally filed. They are also clear. The following minor points, however, are noted.
 - 8.1 In claim 1, page 38, at line 15, in "a period" should probably read in "the period". The same goes for the corresponding part of claim 8 (page 42, at line 20).
 - 8.2 In claim 8, page 43, at line 1, "either indicating both" should read "either both indicating".
9. The Board also notes the following.
 - 9.1 The description has not been adapted to the amended claims. That remains to be done.
 - 9.2 The Board has not examined the dependent claims with respect to compliance with Articles 84 and 123(2) EPC.

Order

For these reasons it is decided that:

The decision under appeal is set aside.

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

The Registrar:

The Chairman:



T. Buschek

S. Wibergh

Decision electronically authenticated