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Datasheet for the decision of 6 March 2020

Case Number: T 1065/17 - 3.5.05

Application Number: 09851660.2

Publication Number: 2506136

IPC: G06F3/12

Language of the proceedings: EN

Title of invention:
DOCUMENT PROCESSING DEVICE, CONTROL METHOD, AND PROGRAM

Applicant:
Canon Kabushiki Kaisha

Headword:
Combining structured XPS documents comprising print settings / Canon

Relevant legal provisions:
EPC Art. 56

Keyword:
Inventive step - (no) - obvious combination of known features - obvious modification

Decisions cited:

Catchword:

Europäisches Patentamt
European Patent Office
Office européen des brevets

Beschwerdekammern

Boards of Appeal

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Case Number: T 1065/17 - 3.5.05

D E C I S I O N
of Technical Board of Appeal 3.5.05
of 6 March 2020

Appellant: (Applicant)	Canon Kabushiki Kaisha 30-2, Shimomaruko 3-chome, Ohta-ku, Tokyo 146-8501 (JP)
Representative:	Foxon, Rachel Siobhan Canon Europe Ltd European Patent Department 3 The Square Stockley Park Uxbridge, Middlesex UB11 1ET (GB)
Decision under appeal:	**Decision of the Examining Division of the European Patent Office posted on 18 November 2016 refusing European patent application No. 09851660.2 pursuant to Article 97(2) EPC.**

Composition of the Board:

Chair	A. Ritzka
Members:	N. H. Uhlmann
	N. Obrovski

Summary of Facts and Submissions

I. The appeal lies from the decision of the examining division to refuse European patent application No. 09851660.2.

II. The examining division made reference to the following documents:

D1: US 2009/219550

D2: MICROSOFT WINDOWS: "PRINTTICKET AND PRINTCPABILITIES SUPPORT IN WINDOWS PRINT DRIVERS", 6 February 2006 (2006-02-06),Retrieved from the Internet: URL:http://www.microsoft.com/whdc/device/print/XPSDrv_PrintTicket.mspx

D3: US 2009/241024

III. The examining division decided that the main request and the first auxiliary request did not meet the requirements of Article 56 EPC. The second auxiliary request was not admitted, pursuant to Rule 137(3) EPC.

IV. In its statement setting out the grounds of appeal, the appellant submitted an amended main request and amended auxiliary requests 1 and 2 and arguments.

V. The board arranged for oral proceedings to be held.

VI. In a communication on the oral proceedings, the board set out its provisional view of the case. It considered that the requests on file did not meet the requirements of Article 56 EPC.

VII. By letter dated 11 February 2020, the appellant submitted arguments and filed an auxiliary request 3.

VIII. Oral proceedings were held on 6 March 2020.

IX. The appellant requested that the decision under appeal be set aside and that a patent be granted on the basis of the main request, auxiliary request 1, auxiliary request 2 (all filed with the statement of grounds of appeal) or auxiliary request 3 (filed with the appellant's submission of 11 February 2020).

X. Claim 1 of the main request reads as follows:

"A document processing apparatus (211) that executes a combining process of combining a plurality of structured documents, each structured document being constructed of elements in a plurality of hierarchical levels and including at least one page element, comprising:

obtaining means (203) for obtaining print setting information of an element in a higher hierarchical level than the page element; and

characterized by

generation means (203) for generating, before the combining process is executed, print setting information of the page element based on the print setting information of the element in the higher hierarchical level, which is obtained by the obtaining means, wherein the generation means generates first print setting information, before the combining process is executed, based on print setting information of an element in a higher hierarchical level of a first structured document and generates second print setting information, before the combining process is executed, based on print setting information of an element in a higher hierarchical level of a second structured document;

adding means (203) for adding the print setting information generated by the generation means to the page element; and

combining means (203) for generating a combined document by combining the first structured document including a page element to which the first print setting information generated by the generation means is added and the second structured document including a page element to which the second print setting information generated by the generation means is added,

wherein the page element to which the first print setting information generated by the generation means is added and the page element to which the second print setting information generated by the generation means is added are included in the combined document, and

wherein an element in a higher hierarchical level of the combined document includes the print setting information of the element in the higher hierarchical level of the first structured document and does not include the print setting information of the element in the higher hierarchical level of the second structured document."

XI. Claim 1 of auxiliary request 1 reads as follows:

"A document processing apparatus (211) that executes a combining process of combining a plurality of structured documents, each structured document being constructed of elements in a plurality of hierarchical levels and including at least one page element, comprising:

obtaining means (203) for obtaining print setting information of an element in a higher hierarchical level than the page element; and

characterized by

generation means (203) for generating, before the combining process is executed, print setting information of the page element based on the print setting information of the element in the higher hierarchical level, which is obtained by the obtaining means, wherein the generation means generates first print setting information based on print setting information of an element in a higher hierarchical level than a page element of a first structured document and generates second print setting information based on print setting information of an element in a higher hierarchical level than a page element of a second structured document;

adding means (203) for adding, before the combining process is executed, the first print setting information generated by the generation means to the page element of the first structured document and adding, before the combining process is executed, the second print setting information generated by the generation means to the page element of the second structured document;

combining means (203) for generating a combined document by combining the first structured document including the page element to which the first print setting information generated by the generation means is added and the second structured document including the page element to which the second print setting information generated by the generation means is added;

wherein the page element to which the first print setting information generated by the generation means is added and the page element to which the second print

setting information generated by the generation means is added are included in the combined document, and

wherein an element in a higher hierarchical level than a page element of the combined document includes the print setting information of the element in the higher hierarchical level of the first structured document and does not include the print setting information of the element in the higher hierarchical level of the second structured document."

XII. Claim 1 of auxiliary request 2 is based on claim 1 of auxiliary request 1 with the following added feature:

"print command generation means (225) for generating a print command based on the combined document".

XIII. Claim 1 of auxiliary request 3 is based on claim 1 of auxiliary request 2 with the following added feature:

"folder generating means for generating a folder with a unique name in a root of the first structured document".

Furthermore, the wording "arranging the page element of the second structured document in the folder for" is added after the term "combined document by" in the integer defining the combining means.

Reasons for the Decision

The present application pertains to a device and method for combining structured documents in which print setting information of a document is added to the pages of this document before the combining takes place.

Main request

1. Patentability

The board holds that the subject-matter of the independent claims does not involve an inventive step.

1.1 Document D1 pertains to combining a plurality of structured documents which results in a combined document. Hence, the board agrees with the appellant that this document forms a suitable starting point for the inventive-step analysis.

1.2 Document D1 discloses a method which combines two structured XPS documents to a resulting XPS document. The combined document comprises pages from both XPS documents (Figures 2, 5A, 5B and 8, paragraphs 47 and 63 to 76). Print setting information (print tickets) of elements on different hierarchical levels (pages, documents and jobs) are obtained and selectively preserved in the combined document (Figure 5B, paragraphs 71 to 72, claims 10 to 12). The third column of Figures 5A and 5B illustrates that the print tickets and their assignment to a document or page are preserved.

1.3 In paragraph 72, document D1 refers to possible problems and issues on the merging or ignoring of print tickets in the course of combining XPS documents. However, D1 does not specify in detail the handling of the print tickets in such situations.

1.4 Therefore, Document D1 does not disclose that:

(m1) print setting information of page elements based on print setting information of an element in a higher hierarchical level is generated before the combining process is executed; that this generated print setting information is added to the page elements and that

these page elements are included in the combined document

(m2) an element in a higher hierarchical level of the combined document includes the print setting information of the element in the higher hierarchical level of the first structured document and does not include the print setting information of the element in the higher hierarchical level of the second structured document

1.5 The technical effect of the distinguishing feature (m1) is that the effective "print setting information applied to each page can be prevented from changing before and after the documents are combined". This effect is referred to in paragraph 90 of the description of the application in suit.

1.6 Thus, the objective technical problem to be solved is "how to ensure that effective print setting information of pages is not changed in the course of the combining of documents".

1.7 Given this problem and the disclosure in paragraph 72 of document D1 that merging of print tickets of XPS documents may be necessary, the skilled person would have consulted document D2, which describes in detail the handling and merging of print tickets in XPS documents.

1.8 D2 discloses two structured documents: FixedDocument_1 and FixedDocument_2 (Figure 4 on page 8). Both comprise two hierarchical levels: the document itself, with a PrintTicket attached, and, on a lower hierarchical level, pages with corresponding PrintTickets. Merge of PrintTickets takes place before an "effective PrintTicket is required for processing, such as in a print driver" (page 6, lines 2 to 5).

1.9 Similarly, "PrintTickets also must be merged in the processing filters of the XPSDrv print driver. As the XPSDrv print driver processing filters process the document parts for printing, the PrintTickets must be cached from the document parts that apply to the current document part so that they can be merged and the filter can apply the correct settings" (last paragraph on page 7 and Figure 7 on page 13). Furthermore, a PrintTicket assigned to the FixedDocument_2 is applied only to the pages which belong to this FixedDocument (page 9, ninth paragraph, which begins with the words "When the document-level", and page 13, third paragraph).

1.10 XPS documents are processed for printing by an XPSDrv print driver (last paragraph on page 12). The printing results in a **combined document** that comprises pages from FixedDocument_1 and FixedDocument_2 for which the effective PrintTicket has previously been generated and applied.

1.11 By merging PrintTickets as depicted in Figure 7, the objective technical problem set out in section 1.6 is solved because the effective PrintTicket of a page comprises precisely the PrintTicket information of the element in a higher hierarchical level, i.e. the FixedDocument and not the other sibling FixedDocuments (page 13, third paragraph).

1.12 In conclusion, the skilled person would have been motivated to add D2's merging function to the teaching of document D1 and have arrived at distinguishing feature (m1) in an obvious way.

1.13 Distinguishing feature (m2) does not lead to any effect. Considering that print settings information would be added from elements in higher hierarchical level to page elements, as explained above in sections

1.5 to 1.12, the print setting information on the higher hierarchical level does not play any functional role. Moreover, paragraph 72 of document D1 teaches that in some cases one of the settings may be ignored and that "there is no way of including both job level tickets". Hence, feature (m2) does not support the presence of an inventive step.

2. The arguments of the appellant are not convincing.

2.1 The board is of the view that the apparatus as claimed cannot lead, directly or indirectly, to saving paper when a combined document is printed because the claims cover any kind of print setting information.

2.2 The appellant argued that document D1 disclosed the creation of a print container which preserved documents as separate entities. However, claim 1 does not specify that the combined document may not comprise documents as separate entities. Moreover, the combined document, as depicted in the third column of Figure 5B of D1, is an XPS document, as the structured documents are, and comprises all elements of these documents.

2.3 The appellant stated that document D1 disclosed that any merging of print tickets took place (in step 810) after the combining of structured documents. In contrast, the independent claims required that print settings information be added to pages before the combining process is executed.

The board is not persuaded but notes that Figure 8 seems to suggest that the processing of print tickets (step 810, PT) is performed after elements are combined in a container (step 808). However, given the objective technical problem (section 1.6) and the explanation in document D1, paragraph 72, that "each original print container may have different job level print tickets,

and since there is no way of including both job level print tickets, they can be merged", it is clear that the merging of print tickets must be made before the combining process is executed. Otherwise, the information in a print ticket which cannot be included in the combined document would be lost. Moreover, document D2 discloses the generation of an effective PrintTicket for a page, which takes place before a combined printed document is produced (section 1.10 above).

2.4 The appellant argued that the generation means in claim 1 generated "second print setting information" using "the print setting information of the element in the higher hierarchical level of the **second** structured document" not included in the higher hierarchical level of the **combined** document and that the adding means in claim 1 added "the second print setting information" to "the page element".

2.5 In the board's view, this observation does not contradict the inventive-step reasoning set out above. Claim 1 states that the generation takes place "before the combining process is executed". In other words, the print setting information not included in the **combined** document (because only the print setting information of the first structured document is included) is, before the combining takes place, included in the pages of the second structured document, and the generation means takes it from there.

Hence, claim 1 does not require that print setting information not included in the structured document be added to pages of this document. Anyhow, this would be impossible.

2.6 The appellant argued that the document depicted on D2's Figure 4 was a "combined document" which included the PrintTicket to be applied to the pages, contrary to the claim's requirement that the combined document "does not include the print setting information of the element in the higher hierarchical level of the second structured document" (page 2, last two paragraphs).

This argument is not convincing. The **combined document** as claimed is not anticipated by the Fixed Document Sequence of Figure 4 in D2 but by a document resulting from D2's printing process (see section 1.10 above). FixedDocument_1 and FixedDocument_2 of Figure 4 correspond to the two **structured documents** as claimed (section 1.8 above).

2.7 Pointing to paragraph 72 of document D1, the appellant argued that this paragraph suggested some solutions, for instance to ignore one of the settings. Thus, the skilled person would not have been motivated to look for another solution.

The board disagrees. Paragraph 72, last sentence, teaches that "each original print container may have different job level print tickets, and since there is no way of including both job level print tickets, they can be merged". Document D1 does not provide any details on merging. Thus, the skilled person would have taken other documents into consideration (see also section 1.7 above).

Auxiliary request 1

3. Patentability

3.1 The independent claims of this request have been amended "to define in more detail the operation of the adding means and that this adds the first and second print setting information to the first and second

structured documents respectively, before the combining process is executed".

3.2 The appellant referred to the first paragraph of the section "Merging and Validating an XML PrintTicket" on page 7 of document D2 and argued that, according to this paragraph, applications might be required to merge PrintTickets when a PrintTicket is returned by the Print dialog box. Document D1 disclosed print options in Figure 7 (steps 704 and 718). Consequently, the appellant argued, the teaching of Figure 7 had to be combined with the merging function of document D2.

The board disagrees. Document D2 discloses that PrintTickets "also must be merged in the processing filters of the XPSDrv print driver" (last paragraph on page 7). Hence, the merging function as described in document D2 can be used independently of any Print dialog box or print options setting means. Moreover, the description passage relating to Figure 7 (paragraphs 61 and 62 of document D1) mentions a print ticket in passing only. Consequently, the inventive-step analysis detailed in sections 1.1 to 1.3 above is based on Figures 5A, 5B and 8 and paragraphs 63 to 76.

3.3 The board addressed the arguments on the generating and adding of print setting information taking place before the combining process in section 2.3 above. This reasoning applies, *mutatis mutandis*, also to the independent claims of auxiliary request 1.

3.4 Consequently, the subject-matter of the independent claims does not involve an inventive step.

Auxiliary request 2

4. Patentability

4.1 The feature "generating a print command based on the combined document" has been added to the independent claims.

4.2 Figure 8 of document D1 discloses, as a final step 812, "saving or sending to printer". Thus, the added feature forms part of the state of the art and cannot contribute to an inventive step.

Auxiliary request 3

5. Patentability

5.1 Two features have been added to the independent claims:

- "folder generating means for generating a folder with a unique name in a root of the first structured document"
- "arranging the page element of the second structured document in the folder"

5.2 Document D1 suggests similar features. The third column of Figure 5B discloses a combined XPS document comprising a sub-part called "DOCUMENT 2". This sub-part includes the pages from the second source document on Figure 5A, third column, lower part. As, in the application and D1 and D2, XPS documents are ZIP files comprising a number of files and folders (D1, Figure 6), the sub-part "DOCUMENT 2" is a folder having a unique name. This folder is created in the first structured document, i.e. immediately after the pages of the first structured document.

5.3 Document D1 does not disclose that the folder is generated **in a root** of the first structured document.

5.4 The board holds that creating the folder in a root of the first document amounts to a generally known and widely used document and file processing technique. Furthermore, paragraph 84 of the description of the application in suit states that "such a folder can be generated at any place, as long as the place is a place that prevents the name from overlapping". Thus, it amounts to an obvious implementation detail that the folder is generated in a root of the first structured document.

5.5 For these reasons, the subject-matter of the independent claims does not involve an inventive step.

6. Conclusion

Neither of the appellant's requests satisfies the requirements of the EPC.

Order

For these reasons it is decided that:

The appeal is dismissed.

The Registrar: The Chair:

C. Rodriguez Rodriguez A. Ritzka

Decision electronically authenticated