

UNITED STATES PATENT AND TRADEMARK OFFICE

**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Ex parte THOMAS M. GILLIHAN and LARRY ALAN WESTERMAN

Appeal No. 2003-0549
Application No. 09/149,408

ON BRIEF

Before SMITH, FLEMING, and BARRY, *Administrative Patent Judges*.

BARRY, *Administrative Patent Judge*.

DECISION ON APPEAL

A patent examiner rejected claims 1, 5-11, 15, 16, 20, and 21. The appellants appeal therefrom under 35 U.S.C. § 134(a). We affirm-in-part.

BACKGROUND

The invention at issue on appeal is an interface for formatting documents to be printed by a computer. (Spec. at 1.) "Electronic documents" are data files created with a word processing, spreadsheet, database, drawing, or other application program. (*Id.* at 2.) A computer can generally reproduce electronic documents as hard copy or printed output. Computer printers feature a printing quality rivaling that of traditional

printing methods and can incorporate advanced operations to facilitate the assembly of complex documents. (*Id.* at 2.)

Computer printers can be equipped to perform operations beyond converting an electronic page of text or graphics to a printed page. Selecting printing stock; printing in duplex (two-side) or simplex (single-side) mode; and printing multiple pages on a single sheet of paper exemplify the special printing operations available with certain printers. Such operations alter the operation of a printer's printing and paper handling mechanisms to produce the changes needed to convert a formatted electronic document to a printed output with the desired printer applied formatting. (*Id.* at 3.) Because such operations alter operation of these mechanisms, explain the appellants, selected operations will apply to the entirety of a print job and will persist for subsequent print jobs until a user resets the associated options. (*Id.* at 3-4.) Because the formatting of the electronic document and the operation of the printer's mechanisms to produce the special printing operations are controlled by separate programs, they add, some printing operations are difficult or impossible without modifying the original electronic document from the associated application program. For example, inserting a blank page in an "as printed" document requires a user to insert a blank page in the original electronic document via the application program. (*Id.* at 4.)

In contrast, the appellants' interface allows a user to apply non-persistent formatting changes to individual pages or groups of pages of an electronic document without altering the original electronic document. (Appeal Br. at 3-4.) When the user selects the print operation in an application program, the interface displays a window showing thumbnail images of the pages of the electronic document so that he can select a page or group of pages within the document. When a page or group of pages is selected, pop-up menus appear enabling the user to select optional special formatting operations to apply to the selected page or group of pages. (*Id.* at 4.)

The appellants' interface applies the formatting changes to a copy of the data file comprising the electronic document passed to the interface by the application program with which it was created. The original electronic document is unaltered and can be used to compose other printed output without the need to remove formatting changes made for an earlier printing. (*Id.*)

A further understanding of the invention can be achieved by reading the following claim.

21. A printing interface for a computer system having an application program for generating an original electronic document having a plurality of pages and a printing device for producing printed output, said printing interface comprising:

(a) a receiver receiving a copy of said original electronic document; and

(b) a user interface comprising a graphical display of an image for a plurality of pages of said original electronic document and an icon representing a page subject to a formatting change applied through said interface, said interface enabling a computer user to cause said printing device to print said copy of said original electronic document and to change the format of a page, but not all pages of said copy, by applying, at least, one of the following formatting changes to said page:

- (1) change paper stock;
- (2) duplex printing;
- (3) simplex printing;
- (4) mirroring of an image;
- (5) rotation of image;
- (6) negation of image;
- (7) zoom;
- (8) n-up printing;
- (9) guttering;
- (10) print multiple copies of said page;
- (11) leave said page unprinted; and
- (12) overlaying a watermark on said page.

Claims 1, 5, and 21 stand rejected under 35 U.S.C. § 102(e) as anticipated by U.S. Patent No. 6,262,732 ("Coleman"). Claims 6, 7, 8, 9, and 10 stand rejected under 35 U.S.C. § 103(a) as obvious over Coleman and U.S. Patent No. 5,751,286 ("Barber"). Claims 11 and 15 stand rejected under § 103(a) as obvious over Coleman and U.S. Patent No. 5,634,091 ("Sands"). Claims 16 and 20 stand rejected under § 103(a) as obvious over Coleman and U.S. Patent No. 5,301,262 ("Kashiwagi").

OPINION

Our opinion addresses the claims in the following order:

- claims 1, 5-11, 15, 16, and 20
- claim 21.

A. CLAIMS 1, 5-11, 15, 16, AND 20

Rather than reiterate the positions of the examiner or the appellants *in toto*, we focus on the main point of contention therebetween. The examiner asserts, "Coleman discloses . . . enabling a user to apply formatting changes to less than all of the plurality of pages of the copy (column 2, lines 54-57 and the abstract, lines 6-12) . . . free from changing the original document (rotating or copying the document) (column 3, lines 37-40 and column 8, lines 1-5). . . ." (Examiner's Answer at 4.) The appellants argue, "Coleman discloses an interface in which modifications are performed on a page of the original document and a replica of the modified page is then created to reflect the changes to the original." (Reply Br. at 4.)

In addressing the point of contention, the Board conducts a two-step analysis. First, we construe the independent claim at issue to determine their scope. Second, we determine whether the construed claims are anticipated or would have been obvious.

1. Claim Construction

"Analysis begins with a key legal question -- *what is the invention claimed?*" *Panduit Corp. v. Dennison Mfg. Co.*, 810 F.2d 1561, 1567, 1 USPQ2d 1593, 1597 (Fed. Cir. 1987). In answering the question, "the Board must give claims their broadest reasonable construction. . . ." *In re Hyatt*, 211 F.3d 1367, 1372, 54 USPQ2d 1664, 1668 (Fed. Cir. 2000).

Here, claim 1 recites in pertinent part the following limitations: "enabling a user to apply formatting changes to less than all of said plurality of pages of said copy . . . free from changing said original electronic document. . . ." Claims 5, 6, 11, and 16 include similar limitations. Giving claims 1, 5, 6, 11, and 16 their broadest, reasonable construction, the limitations require reformatting a copy an electronic document without altering the original electronic document.

2. Anticipation and Obviousness Determinations

"Having construed the claim limitations at issue, we now compare the claims to the prior art to determine if the prior art anticipates those claims." *In re Cruciferous Sprout Litig.*, 301 F.3d 1343, 1349, 64 USPQ2d 1202, 1206 (Fed. Cir. 2002). "A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros., Inc.*

v. Union Oil Co., 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987) (citing *Structural Rubber Prods. Co. v. Park Rubber Co.*, 749 F.2d 707, 715, 223 USPQ 1264, 1270 (Fed. Cir. 1984); *Connell v. Sears, Roebuck & Co.*, 722 F.2d 1542, 1548, 220 USPQ 193, 198 (Fed. Cir. 1983); *Kalman v. Kimberly-Clark Corp.*, 713 F.2d 760, 771, 218 USPQ 781, 789 (Fed. Cir. 1983)). "[A]bsence from the reference of any claimed element negates anticipation." *Kloster Speedsteel AB v. Crucible, Inc.*, 793 F.2d 1565, 1571, 230 USPQ 81, 84 (Fed. Cir. 1986).

Here, Coleman discloses "a user interface for managing one or more document pages arranged in stacks and for navigating within the stacks of document pages." Col. 1, ll. 15-17. "[T]he information corresponding to each page image is represented by a miniature replica of the information as it would appear on a printed page." Col. 6, ll. 23-26. "[V]arious system processes may be performed on the current page of a stack," col. 7, ll. 59-60, to reformat the page. One such "system process rotates the current page." Col. 8, l. 9.

We are unpersuaded, however, that the reference rotates a page without altering the original electronic page. To the contrary, "the process of page rotation comprises . . . rotating [t]he page itself. . . ." Col. 13, ll. 1-2. More specifically, "the

information contents of the page corresponding to the screen image is modified such that a printed representation of the page information is rotated." Col. 8, ll. 15-17.

The absence of reformatting a copy an electronic document without altering the original electronic document negates anticipation. Therefore, we reverse the anticipation rejection of claims 1 and 5.

The next inquiry is whether the subject matter would have been obvious. "In rejecting claims under 35 U.S.C. Section 103, the examiner bears the initial burden of presenting a *prima facie* case of obviousness." *In re Rijckaert*, 9 F.3d 1531, 1532, 28 USPQ2d 1955, 1956 (Fed. Cir. 1993) (citing *In re Oetiker*, 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992)). "A *prima facie* case of obviousness is established when the teachings from the prior art itself would . . . have suggested the claimed subject matter to a person of ordinary skill in the art." *In re Bell*, 991 F.2d 781, 783, 26 USPQ2d 1529, 1531 (Fed. Cir. 1993) (quoting *In re Rinehart*, 531 F.2d 1048, 1051, 189 USPQ 143, 147 (CCPA 1976)).

Here, the examiner does not allege, let alone show, that the addition of Barber, Sands, or Kashiwagi cures the aforementioned deficiency of Coleman. Absent a teaching or suggestion of reformatting a copy an electronic document without altering

the original electronic document, we are unpersuaded of a *prima facie* case of obviousness. Therefore, we reverse the obviousness rejections of claim 6; of claims 7-10, which depend therefrom; of claim 11; of claim 15, which depends therefrom; of claim 16; and of claim 20, which depends therefrom.

B. CLAIM 21

Rather than reiterate the positions of the examiner or the appellants *in toto*, we focus on the following points of contention therebetween:

- receiving a copy of a document
- reformatting a page of the copy

1. Receiving a Copy of a Document

The examiner makes the following findings.

[I]t is extremely well known in the computer processing art that the "original" of a document is stored in the hard drive or disk drive of the computer system. If a user wishes to print or make changes to (or format) the original document or parts of the original document, a "copy" or "replica" of that document or pages of that document are transmitted from the disk drive to a temporary RAM or a display buffer and displayed to the user from that RAM or display buffer. The original remains on the disk drive while the printing or changes are made on the replica. After the user prints or makes changes to the *copy* or *replica* of that original, the user has the option of either saving the changes made (in which case a new file can be created) or deleting the replica, in which case the "original" is preserved.

(Examiner's Answer at 11.) The appellants argue, "when a user invokes a prior art printing interface from an application program to print an electronic document, a copy of

the document is not created in the processor for formatting by the printing interface even though the computer system has a processor (2) or a memory capable of receiving a copy." (Reply Br. at 3.)

a. Claim Construction

Claim 21 recites in pertinent part the following limitations: "receiving a copy of said original electronic document." Giving the claim its broadest, reasonable construction, the limitations require receiving a copy of an original electronic document.

b. Anticipation Determination

"[A]nticipation is a question of fact." *Hyatt*, 211 F.3d at 1371, 54 USPQ2d at 1667 (citing *Bischoff v. Wethered*, 76 U.S. (9 Wall.) 812, 814-15 (1869); *In re Schreiber*, 128 F.3d 1473, 1477, 44 USPQ2d 1429, 1431 (Fed. Cir. 1997)). Furthermore, "flexibility in the rule that 'anticipation' requires that every element of the claims appear in a single reference accommodates situations where the common knowledge of technologists is not recorded in the reference; that is, where technological facts are known to those in the field of the invention. . . ." *Continental Can Co. v. Monsanto Co.*, 948 F.2d 1264, 1269, 20 USPQ2d 1746, 1749-50 (Fed. Cir. 1991).

Here, Coleman "relates . . . to the manipulation of documents in an information processing system. . . ." Col. 1, ll. 13-14. Figure 1 of the reference shows that the information processing system includes a processor 2, a memory 10, and a storage 12. The "[m]emory 10, which is typically a random access memory, provides temporary storage for processor 2; [the] storage 12, which may use magnetic or optical storage techniques for example, provides long-term storage." Col. 5, ll. 27-30. We agree with the examiner's finding that technologists in the field of information processing systems, which the examiner calls the "computer processing art," (Examiner's Answer at 11), know that Coleman's information processing system keeps the original of an electronic document in its storage 12 for long-term storage. When a user wishes to print or reformat the electronic document, we further agree with the examiner's finding that technologists in the field know that the information processing system transfers a copy of the document into its memory 10 for temporary storage. In such a situation, we find that Coleman's reference's memory 10 receives a copy of an original electronic document.

2. Reformatting a Page of the Copy

The examiner finds, "[i]n column 3, lines 37-43, Coleman **CLEARLY** discloses '**rotat[ing] an image** and modify[ing] the corresponding information in a selected page such that a printed representation will also be rotated'." (Examiner's Answer at 11.) The appellants argue, "Coleman does not disclose reformatting (page rotation) by

manipulation of an image of the page." (Reply Br. at 5.) They further argue, "it is clear from the Coleman disclosure that the modifications are not being made 'free from changing the original electronic document' as recited in the claims." (*Id.* at 4.)

a. Claim Construction

"[L]imitations are not to be read into the claims from the specification." *In re Van Geuns*, 988 F.2d 1181, 1184, 26 USPQ2d 1057, 1059 (Fed. Cir. 1993) (citing *In re Zletz*, 893 F.2d 319, 321, 13 USPQ2d 1320, 1322 (Fed. Cir. 1989)). Here, claim 21 recites in pertinent part the following limitations: "change the format of a page, but not all pages of said copy, by applying, at least . . . rotation of image. . . ." Contrary to the appellants' arguments, the claim requires neither "reformatting (page rotation) by manipulation of an image of the page," (Reply Br. at 5), nor "that . . . modifications are . . . made 'free from changing the original electronic document'. . . ." (*Id.* at 4.) Giving the claim its broadest, reasonable construction, the limitations further require reformatting a page of the copy of the electronic document.

b. Anticipation Determination

As mentioned regarding claims 1, 5-11, 15, 16, and 20, Coleman discloses that "various system processes may be performed on the current page of a stack," col. 7,

ll. 59-60, to reformat the page. One such "system process rotates the current page." Col. 8, l. 9. Because the reference's information processing system operates on a copy of an electronic document stored temporarily in its memory 10, we find that Coleman reformats a page of the copy of the electronic document. Therefore, we affirm the anticipation rejection of claim 21.

CONCLUSION

In summary, the rejection of claims 1 and 5 under § 102(e) and the rejections of claims 6-11, 15, 16, and 20 under § 103(a) are reversed. The rejection of claim 21 under § 102(e), however, is affirmed.

"Any arguments or authorities not included in the brief will be refused consideration by the Board of Patent Appeals and Interferences. . . ." 37 C.F.R. § 1.192(a). Accordingly, our affirmance is based only on the arguments made in the briefs. Any arguments or authorities omitted therefrom are neither before us nor at issue but are considered waived. *Cf. In re Watts*, 354 F.3d 1362, 1368, 69 USPQ2d 1453, 1457 (Fed. Cir. 2004) ("[I]t is important that the applicant challenging a decision not be permitted to raise arguments on appeal that were not presented to the Board.") No time for taking any action connected with this appeal may be extended under 37 C.F.R. § 1.136(a).

AFFIRMED-IN-PART

JERRY SMITH
Administrative Patent Judge

MICHAEL R. FLEMING
Administrative Patent Judge

LANCE LEONARD BARRY
Administrative Patent Judge

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Appeal No. 2003-0549
Application No. 09/149,408

Page 15

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