

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte DAVID SALGADO and SRINIVASA MURTHY

Appeal 2008-0995
Application 09/731,094
Technology Center 2600

Decided: June 27, 2008

Before KENNETH W. HAIRSTON, JOHN A. JEFFERY, and CARLA M. KRIVAK, *Administrative Patent Judges*.

JEFFERY, *Administrative Patent Judge*.

DECISION ON APPEAL

Appellants appeal under 35 U.S.C. § 134 from the Examiner's rejection of claims 1-11. We have jurisdiction under 35 U.S.C. § 6(b). We affirm.

STATEMENT OF THE CASE

Appellants invented a method for automatically updating a printer driver on a computer. In one implementation, the printer driver checks for updates periodically and contacts an update site, such as a web page or network server, for such updates. If a new driver is found with a more current version, it is downloaded onto the host computer and installed, and the previous version is uninstalled.¹ Claim 1 is illustrative:

1. A method for automatically updating a printer driver on a computer comprising the steps of:

(A) contacting a remote network location using a contact subroutine installed on said computer;

(B) comparing a first version of the printer driver installed on the computer with a second version stored at the remote network location using a determining subroutine installed on said computer;

(C) downloading and installing the printer driver from the remote location onto the computer if it is a more recent version of the printer driver than said first version currently installed on the computer using a downloading and installing subroutine installed on said computer; and

(D) uninstalling the version of the printer driver previously stored on the computer using an uninstalling subroutine installed on said computer.

The Examiner relies on the following prior art references to show unpatentability:

Alderson	US 5,019,963	May 28, 1991
Marbry	US 5,692,111	Nov. 25, 1997
Davis	US 5,742,829	Apr. 21, 1998

¹ See generally Spec. 3:16-4:22.

Heath	US 6,006,034	Dec. 21, 1999
Goodman	US 6,757,071 B1	Jun. 29, 2004 (filed Nov. 9, 1999)

1. Claims 1 and 3-10 stand rejected under 35 U.S.C. § 103(a) as unpatentable over Heath in view of Alderson or Marbry.²
2. Claim 2 stands rejected under 35 U.S.C. § 103(a) as unpatentable over Heath in view of Alderson or Marbry, and further in view of Davis.
3. Claim 11 stands rejected under 35 U.S.C. § 103(a) as unpatentable over Heath in view of Alderson or Marbry, and further in view of Goodman.

Rather than repeat the arguments of Appellants or the Examiner, we refer to the Briefs and the Answer³ for their respective details. In this

² Although the Examiner provides two different grounds of rejection for claims 1 and 3-10 based on (1) Heath in view of Alderson or Heath in view of Marbry; and (2) Heath in view of Alderson or Marbry (Ans. 3), we nonetheless presume that the Examiner intended for only the second ground of rejection to apply to claims 1 and 3-10 (i.e., Heath in view of Alderson or Marbry).

Our presumption is based on the record before us, primarily the Examiner's statements in the Answer which suggest that only the second ground of rejection was intended. For example, the Examiner indicates on Page 12 of the Answer that "*the rejection is based on Heath in view of Alderson or Heath in view of Marbry, the discussion of Heath in view of Alderson does not require[] the teaching of Marbry*" (Ans. 12; emphasis added). Also, the Examiner's rejections of claims 2 and 11 refer to rejections of claims 1 and 7 based on Heath in view of Alderson or Marbry, respectively (Ans. 8-9).

³ Throughout this opinion, we refer to (1) the Appeal Brief filed September 8, 2006; (2) the Examiner's Answer filed March 6, 2007; and (3) the Reply Brief filed April 23, 2007.

decision, we have considered only those arguments actually made by Appellants. Arguments which Appellants could have made but did not make in the Briefs have not been considered and are deemed to be waived. *See* 37 C.F.R. § 41.37(c)(1)(vii).

OPINION

Claims 1 and 3-10

We first consider the Examiner's obviousness rejection of claims 1 and 3-10 over Heath in view of Alderson or Marbry (Ans. 3-8). In rejecting claims under 35 U.S.C. § 103, it is incumbent upon the Examiner to establish a factual basis to support the legal conclusion of obviousness. *See In re Fine*, 837 F.2d 1071, 1073 (Fed. Cir. 1988). In so doing, the Examiner must make the factual determinations set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 17 (1966).

Discussing the question of obviousness of a patent that claims a combination of known elements, the Court in *KSR Int'l v. Teleflex, Inc.*, 127 S. Ct. 1727 (2007) explains:

When a work is available in one field of endeavor, design incentives and other market forces can prompt variations of it, either in the same field or a different one. If a person of ordinary skill can implement a predictable variation, §103 likely bars its patentability. For the same reason, if a technique has been used to improve one device, and a person of ordinary skill in the art would recognize that it would improve similar devices in the same way, using the technique is obvious unless its actual application is beyond his or her skill. *Sakraida [v. AG Pro, Inc.]*, 425 U.S. 273 (1976)] and *Anderson's-Black Rock [Inc. v. Pavement Salvage Co.]*, 396 U.S. 57 (1969)] are illustrative—a court must ask whether the improvement is more

than the predictable use of prior art elements according to their established functions.

KSR, 127 S. Ct. at 1740. If the claimed subject matter cannot be fairly characterized as involving the simple substitution of one known element for another or the mere application of a known technique to a piece of prior art ready for the improvement, a holding of obviousness can be based on a showing that “there was an apparent reason to combine the known elements in the fashion claimed.” *Id.* at 1740-41. Such a showing requires “some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness. . . . [H]owever, the analysis need not seek out precise teachings directed to the specific subject matter of the challenged claim, for a court can take account of the inferences and creative steps that a person of ordinary skill in the art would employ.” *Id.* at 1741 (quoting *In re Kahn*, 441 F.3d 977, 988 (Fed. Cir. 2006)).

If the Examiner’s burden is met, the burden then shifts to the Appellants to overcome the prima facie case with argument and/or evidence. Obviousness is then determined on the basis of the evidence as a whole and the relative persuasiveness of the arguments. *See In re Oetiker*, 977 F.2d 1443, 1445 (Fed. Cir. 1992).

Regarding representative claim 1,⁴ Appellants argue that “there is no motivation to combine Heath with either Alderson or Marbry.” Appellants emphasize that “Heath relates to the *client*-initiated and conducted updating of application programs, while Marbry relates to the downloading of print configuration data that was not previously stored on a client workstation

⁴ Appellants argue claims 1 and 3-10 together as a group. *See* App. Br. 4-8. Accordingly, we select claim 1 as representative. *See* 37 C.F.R. § 41.37(c)(1)(vii).

(i.e., not an updating process).” Appellants further note that “Alderson relates to the *server*-initiated and conducted process of updating programs on client workstations.” As such, Appellants contend, any proposed combination of [these references] would inevitably change the principle of operation of the inventions since the methods of updating the client workstations are different and initiated by different computers (App. Br. 4-5; emphasis omitted).

The Examiner notes that since Alderson teaches that a printer driver is a data file whose version needs to be updated, ordinarily skilled artisans would have modified Heath to update a printer driver data file for the disclosed application program. Such a modification, the Examiner contends, would enable printing with the most up-to-date printer driver (Ans. 12).

The issue before us, then, is whether Appellants have shown that the Examiner erred in combining the teachings of Heath with Alderson and Marbry to arrive at the claimed invention. The issue turns on whether there was ample reason to combine the teachings, and whether such a combination would change the principle of operation of the reference’s respective teachings. For the following reasons, we find ample reason on this record to combine the references to arrive at the claimed invention, and that the combination would not change the principle of operation of the references’ teachings.

Heath discloses a system for maintaining application programs on a client computer in a client-server network environment in which the client downloads from a server various components of the application program that have changed. Specifically, in response to a call from the client to the server, the server downloads a catalog of components of a particular

application program running on the client computer. These application program components may include executable files, library files, parameter files, and data files of the application program, and each component has a version identification (Heath, col. 1, ll. 5-18; 50-65).

Upon receipt of the catalog, the client compares (1) the version identification between the components maintained on the server as indicated in the downloaded catalog, and (2) the components maintained on the client. The client then updates the application program on the client's computer by downloading selected components from the server for which the version identifications do not match (Heath, col. 1, l. 65 - col. 2, l. 5; col. 4, ll. 34-58; Figs. 2A-2B). "Once the components have downloaded, any existing components on the client that are no longer needed as a result of the version update are deleted" (Heath, col. 6, ll. 58-60).

Alderson discloses a network-based system that upgrades files on a particular workstation or personal computer (PC) ⁵ connected to a host processor 11. The PC has one or more computer programs stored therein that each comprise a number of data files. "The data files are variable in size and represent an identifiable block of code consisting of one or more code modules." Also, printers may be connected to, or form part of, the PC 12 (Alderson, col. 3, ll. 48-63).

The host in Alderson has an object library containing a copy of each file for each version of a PC program. The host determines if the PC has the latest level data file for the version of program at that PC and, if it does not,

⁵ Alderson uses both the terms "workstation" and "personal computer" (PC) interchangeably as corresponding to numeral 12. *Compare* Alderson, col. 3, ll. 50-51 *with* col. 4, ll. 26-27. For clarity, we refer to a PC when referring to numeral 12 in Alderson.

sends a copy of the latest level data file to the PC to replace that data file (Alderson, Abstract; Fig. 2).

The updating process in Alderson starts with the host sending a query to the PC. In response, the PC sends the host a list of the installed data files and their respective levels. From this information, the host then determines which version of the program is installed at the PC and whether that version is at the latest level. If not, then the host sends a copy of the latest level of the data file required to bring the program up to the latest level. “When the PC 12 receives the new-level data file, it erases the old-level and replaces it with the new-level” (Alderson, col. 4, ll. 30-58; Fig. 3).

As shown in Figure 4, PC 12 has installed therein a program 28 comprising a number of code elements 29-34 which include printer driver code 32. This printer driver code controls the flow of data to be printed through a printer adapter 36 to which a printer is connected (Alderson, col. 6, ll. 7-24; Fig. 4).

Each control code element 29-34 in PC 12 constitutes a data file. For each possible version of the program 28, there will be a copy of the constituent data files in the host’s object library 18. Upon verifying the version of these data files, the host updates the PC’s program accordingly (Alderson, col. 6, ll. 37-48). A representative data file corresponding to the printer driver 32 is shown in Figure 5 (Alderson, col. 6, ll. 57-67; Fig. 5).

Based on the record before us, we find no error in combining the teachings of Alderson with Heath to arrive at the claimed invention. We agree with the Examiner (Ans. 12) that ordinarily skilled artisans would have reasonably modified Heath to update a printer driver in light of Alderson.

Significantly, as we noted above, the components of the application program in Heath are executable files, library files, parameter files, and *data files* of the application program (Heath, col. 1, ll. 60-62; emphasis added). Since the cited prior art teaches updating data files -- data files that correspond to a printer driver (Alderson, col. 6, ll. 18-24, 38-40, 57-67; Fig. 5) -- ordinarily skilled artisans would have ample reason on this record to include printer drivers as the components updated in Heath. Thus, even if we assume, without deciding, that printer drivers are “low level programs” as Appellants contend (App. Br. 6-8), we nonetheless find that Heath teaches updating such “low level programs” by updating *components* of the application programs.

Furthermore, that the host initiates the updating process in Alderson does not change our conclusion. Rather, we find that ordinarily skilled artisans would readily recognize from Alderson that data files in the form of printer drivers can be updated automatically. We see no reason why this fundamental teaching could not be applied to the client-initiated updating process of Heath -- a process that likewise updates components in the form of data files. Such a modification, in our view, would hardly change the principle of operation of Heath’s system, but would merely add the capability of updating printer drivers in addition to the other program components that are updated. Not only is there ample reason on this record to combine Alderson with Heath, we add that modifying Heath to update printer drivers is tantamount to the predictable use of prior art elements according to their established functions -- an obvious improvement. *See KSR*, 127 S. Ct. at 1740.

Likewise, we also find that ordinarily skilled artisans would have modified Heath in light of the teachings of Marbry to arrive at the claimed invention. Marbry discloses a network-based system that enables a workstation 12 to print to a certain printer 22 on the network. To this end, the workstation's operating system 28 requests the configuration information to be copied from the server's bindery 24 to the workstation's memory 26. This copied configuration information and printer driver are then used to print on the printer 22 (Marbry, col. 3, ll. 9-35; col. 3, ll. 57-65; Figs. 1, 3).

While we agree with Appellants (App. Br. 4-5) to the extent that Marbry is not the same type of updating process as disclosed by Heath or Alderson, we nonetheless see no reason why ordinarily skilled artisans could not have modified Heath's updating process to include printer drivers in light of Marbry's teachings. We reach this conclusion noting that Marbry teaches that if provided printer configuration information is incomplete, a database is accessed to retrieve the complete configuration information (Marbry, col. 2, ll. 3-11). This teaching, in our view, would have reasonably suggested the desirability of updating the provided configuration information to, among other things, ensure that it is complete. In any event, we find ample reason on this record to include printer drivers as the components that are updated by Heath in light of the collective teachings of the references.

For the foregoing reasons, Appellants have not persuaded us of error in the Examiner's rejections of representative claim 1. Therefore, we will sustain the Examiner's rejection of that claim, and claims 3-10 which fall with claim 1.

The Rejections of Claims 2 and 11

We will also sustain the Examiner's rejections of (1) claim 2 over Heath in view of Alderson or Marbry, and further in view of Davis (Ans. 8-9), and (2) claim 11 over Heath in view of Alderson or Marbry, and further in view of Goodman (Ans. 9-10). We find that the Examiner has established at least a prima facie case of obviousness that Appellants have not persuasively rebutted. Once the Examiner has satisfied the burden of presenting a prima facie case of obviousness, the burden then shifts to Appellants to present evidence and/or arguments that persuasively rebut the Examiner's prima facie case. *See Oetiker*, 977 F.2d at 1445.

Appellants did not particularly point out errors in the Examiner's reasoning to persuasively rebut the Examiner's prima facie case of obviousness, but merely noted that the addition of the secondary references fails to cure the alleged previously-noted deficiencies of the Examiner's combination of references (App. Br. 8). Since Appellants have not persuasively rebutted the Examiner's prima facie case of obviousness for claims 2 and 11, the rejections are therefore sustained.

DECISION

We have sustained the Examiner's rejections with respect to all claims on appeal. Therefore, the Examiner's decision rejecting claims 1-11 is affirmed.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a)(1)(iv).

Appeal 2008-0995
Application 09/731,094

AFFIRMED

gvw

ALBERT P. SHARPE, III, ESQ.
FAY, SHARPE, FAGAN, MINNICH & MCKEE, LLP
1100 SUPERIOR AVENUE, 7TH FLOOR
CLEVELAND, OH 44114-2518