

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte PAUL E. LUSe and DIETER E. MASSA

Appeal 2007-3636
Application 10/112,789¹
Technology Center 2100

Decided: April 22, 2008

Before JOSEPH L. DIXON, JEAN R. HOMERE, and
ST. JOHN COURTENAY III, *Administrative Patent Judges*.

HOMERE, *Administrative Patent Judge*.

DECISION ON APPEAL

I. STATEMENT OF CASE

Appellants appeal under 35 U.S.C. § 134 from a final rejection of claims 1 through 38. We have jurisdiction under 35 U.S.C. § 6(b). We affirm.

¹ Filed on March. 28, 2002. The real party in interest is Intel Corp.

Appellants invented a method and system for configuring a control device coupled to a peripheral component interconnect (PCI) bus. As depicted in Figure 1, an I/O processor (40) initiates a bus scan to determine the address of each device coupled to the bus (22), and to issue a configuration read request to all of the addressable devices thereon. (Spec. 10, l. 16- 11, l. 6.) In response to the configuration read request, each of the queried devices identifies their respective type and vendor. (*Id.* 13, 5-14.) The processor subsequently utilizes the information obtained from the devices to determine which of them can be configured. (*Id.*)

Independent claim 1 further illustrates the invention. It reads as follows:

1. A method comprising:

initiating a scan of a bus;

determining, based at least in part upon the scan, a location of a device; prior to initiation of the scan, controlling coupling of the device to the bus; and

determining whether to attempt to configure the device based upon information received from the device, the information identifying a vendor and type of the device.

The Examiner relies on the following prior art:

Sacker US 6,502,156 B1 Dec. 31, 2002

PCI Local Bus Specification, Revision 2.2, Dec. 18, 1998, pp. 190-93.²

² The Examiner cites to the “PCI” reference as extrinsic evidence that in response to a bus scan, the configuration software in Sacker inherently

The Examiner rejects the claims on appeal as follows:

Claims 1 through 38 stand rejected under 35 U.S.C. § 102(e) as being anticipated by Sacker.

FINDINGS OF FACT

The following findings of fact (FF) are supported by a preponderance of the evidence.

Sacker

1. As depicted in Figure 1, Sacker discloses a method and system for configuring an I/O device (26) coupled to a PCI bus (22). Upon receiving an initiation configuration cycle from a host computer (10) to scan the PCI bus, an I/O processor (38) connected to a head bus adapter (HBA) (34) causes the HBA to scan the bus. (Col. 3, ll. 50-58.)

2. Sacker further discloses that the firmware on the HBA can initiate the bus scan on its own to identify the I/O device to properly configure the identified device.³ (Col. 3, ll. 50-67.)

identifies the Vendor ID, and the type of a PCI compliant device in order to configure the device. (Ans. 3, 10, 12.)

³ *Id.*

PRINCIPLES OF LAW
ANTICIPATION

In rejecting claims under 35 U.S.C. § 102, a single prior art reference that discloses, either expressly or inherently, each limitation of a claim invalidates that claim by anticipation. *Perricone v. Medicis Pharmaceutical Corp.*, 432 F.3d 1368, 1375-76 (Fed. Cir. 2005), citing *Minn. Mining & Mfg. Co. v. Johnson & Johnson Orthopaedics, Inc.*, 976 F.2d 1559, 1565 (Fed. Cir. 1992). Anticipation of a patent claim requires a finding that the claim at issue “reads on” a prior art reference. *Atlas Powder Co. v. IRECO, Inc.*, 190 F.3d 1342, 1346 (Fed Cir. 1999) (“In other words, if granting patent protection on the disputed claim would allow the patentee to exclude the public from practicing the prior art, then that claim is anticipated, regardless of whether it also covers subject matter not in the prior art.”) (internal citations omitted).

ANALYSIS

Independent claim 1 recites in relevant part in response to a bus scan, receiving from a device coupled to the scanned bus the vendor and type of the device to determine whether it can be configured. (Claims Appendix.) Appellants argue that Sacker does not explicitly or inherently teach these limitations. (App. Br. 8-10.) In response, the Examiner avers that Sacker’s disclosure of identifying an I/O device coupled to a PCI bus to thereby configure the device upon scanning the bus inherently teaches that the

configuration is based on the vendor and type information received from the device in response to the bus scan. (Ans. 3, 10-12.)

Therefore, the issue before us is whether Sacker's disclosure inherently teaches configuring a device coupled to a PCI bus based upon vendor and type information received from the device in response to a bus scan. We answer this inquiry in the affirmative.

As set forth in the findings of fact section, Sacker teaches scanning a PCI bus to identify an I/O device coupled thereto, and to subsequently configure the identified device. (FF 1-2.) Further, the PCI reference teaches a configuration software that scans a PCI compliant bus to identify the devices that are actually present thereon. (PCI, 190, para. 3.) Particularly, the identification of all PCI devices is required to implement a Vendor ID field that identifies the manufacturer of the device. (PCI, p. 192, section 6.2.1.) The identification of the PCI device is also required to implement a device ID field that identifies the device itself. (*Id.*) As evidenced by PCI, one of ordinary skill in the art would have readily recognized that the identification of any PCI compliant device on a PCI bus necessarily involves identifying the type of the device as well as the manufacturer/vendor of the device. Therefore, the ordinarily skilled artisan would recognize that Sacker's identification of the I/O device on the PCI bus necessarily involves identifying the type of the device and its manufacturer before it can be configured.

"In relying upon the theory of inherency, the Examiner must provide a basis in fact and/or technical reasoning to reasonably support the determination that the allegedly inherent characteristic necessarily flows

from the teachings of the applied prior art.” *Ex parte Levy*, 17 USPQ2d 1461, 1464 (Bd. Pat. App. & Inter. 1990). “[A]fter the PTO establishes a prima facie case of anticipation based on inherency, the burden shifts to appellant to ‘prove that the subject matter shown to be in the prior art does not possess the characteristic relied on.’” *In re King*, 801 at 1327(Fed. Cir. 1986) (quoting *In re Swinehart*, 439 F.2d 210, 212-13, (CCPA 1971)). *See also* MPEP §§ 2112 (IV.), (V.).

This reasoning is applicable here. We agree that the Examiner has properly shifted the burden to Appellants by providing a rationale in the Answer that reasonably supports the Examiner’s finding of inherent anticipation with respect to the Sacker reference. In response, Appellants merely allege that PCI does not show that the vendor Id and device type are necessary in identifying a device to be configured in the Sacker’s reference. (App. Br. 10.) Appellants’ mere allegations are insufficient to prove that the subject matter shown to be in the prior art does not possess the characteristic relied on by the Examiner. It follows that Appellants have not shown that the Examiner erred in finding that Sacker anticipates independent claim 1.

Appellants do not provide separate arguments with respect to the rejection of claims 2 through 38. Therefore, we select independent claim 1 as being representative of the cited claims. Consequently, these claims fall together with representative claim 1.

37 C.F.R. § 41.37(c)(1)(vii).

RESPONSE TO THE DISSENTING OPINION

The dissenting opinion, infra, is predicated entirely upon arguments that are not in the record before us. As noted above, Appellants' arguments generally challenge that Sacker inherently teaches identifying the vendor and type of the PCI device. However, nowhere in Appellants' Brief, have Appellants particularly argued that Sacker fails to teach such inherent property of the PCI device because the Examiner fail to show that the PCI device is not a host bus bridge, as excluded in the PCI reference, at page 189. Such arguments were raised *sua sponte* by the dissent. Therefore, they should have no basis in our decision. Arguments that Appellants could have made but chose not to make in the Briefs are deemed to have been waived. *See* 37 § C.F.R. 41.37(c)(1) (vii)(eff. Sept. 13, 2004). *See also In re Watts*, 354 F.3d 1362, 1368, (Fed. Cir. 2004).

The case law only requires the Examiner to provide sufficient rationale/facts in order to make the *prima facie* case of anticipation based on inherency. Here, the Examiner provides extrinsic evidence to substantiate his position that Sacker's PCI device inherently identifies its vendor and its type. In our view, the Examiner's evidence is sufficient to make the initial showing of anticipation. However, as the burden shifts to Appellants, they merely state that Sacker does not inherently teach the claimed feature. Appellants' general challenges simply fail to show that Sacker's PCI device is similar to the host bus bridge, and therefore does not have the inherent characteristics disclosed in the PCI reference. Therefore, Appellants' arguments clearly do not overcome the Examiner's *prima facie* case of anticipation based on inherency.

Additionally, we do not agree with the dissent that the Examiner misses the point of Appellants' arguments with respect to claims 1, and 31. Even though the claim calls for determining whether to *attempt to configure*, Sacker's teaching of configuring the I/O device teaches that limitation. One of ordinary skill would aptly recognize that the computer cannot configure a device unless it first determines that the device is of the type that it can configure. That is the whole point of Appellants' invention.

DECISION

We affirm the Examiner's decision rejecting claims 1 through 38.

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).

AFFIRMED

Dixon, Administrative Patent Judge, Dissenting

From my review of the instant administrative record, I do not find that the Examiner has set forth a sufficient initial showing of anticipation of independent claim 1 relying upon inherency in the Sacker reference using the PCI reference to support the implicit teaching.

First, from my review of Sacker, I do not find that Sacker necessarily requires all PCI devices to provide vendor ID and type information. From my review of the teachings of PCI, I find that page 189 states “All PCI devices (except host bus bridges) must implement Configuration Space. Multifunction devices must provide a Configuration Space for each function implemented (refer to Section 6.2.1.).” With the exclusion of host-bus bridges, I cannot find that the Examiner’s reliance upon later references at pages 190-193 to apply to all PCI devices. Therefore, I cannot agree that Sacker necessarily provides vendor ID and type of device to determine what devices are actually present.

Second, I do not find that the Examiner has squarely and clearly addressed the merits of independent claims 1 and 31 as argued by Appellants. With respect to independent claim 1, the limitation “determining whether to attempt to configure the device based upon information received from the device, the information identifying a vendor and type of the device” is disputed. Here, Appellants argue that page 10 of the Brief that the Sacker reference does not disclose or suggest a step of “determining whether to attempt to configure the device based upon the information received from the device.” I do not find a reasoned response to this argument by the

Examiner. The Examiner in the responsive arguments merely reiterates the rejection in the citation to column 3 of the Sacker reference. I do not find this to be a reasonable response to Appellants' argument.

Furthermore, I do not find a distinct step of determining whether to attempt to configure the device based upon the information received from the device as recited in independent claim 1 in the relied upon teachings of Sacker.

Appellants' Specification at pages 13. 1. 15 -14, 1. 5 discloses the process to determine to attempt to configure the system, and I do not find a corresponding step expressly set forth in the teachings of Sacker. Nor do I find that the Examiner has identified any distinct step. Therefore, I do not find that the Examiner has set forth the requisite initial showing of anticipation and inherency for independent claim 1 and its respective dependent claims to necessitate a shifting of the burden to Appellants.

With respect to independent claim 31, Appellants argue that Sacker does not disclose "selecting, based at least in part upon the information, one or more code modules from which to build one or more procedures to permit at least one of control of and communication with the device." (App. Br. 8-9). Again, I do not find that the PCI reference necessarily requires all PCI devices to provide recited information nor do I find that the Examiner has shown all the limitations are taught by Sacker as discussed above. Therefore, I would reverse the Examiner's rejection of independent claim 31 and its respective dependent claims.

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Independent claims 7 and 19 are similar to independent claim 1, and I would similarly reverse the rejection thereof for lack of a sufficient initial showing. Independent claim 13, 33, 35, and 37 is similar to independent claim 31, and I would similarly reverse the rejection thereof for lack of a sufficient initial showing.

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