

The opinion in support of the decision being entered today was *not* written for publication and is *not* binding precedent of the Board.

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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*Ex parte* AARON GRASSIAN, DANIEL MULLIGAN,  
and MARCUS W. MAY

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Appeal 2007-0833  
Application 10/280,254  
Technology Center 2100

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Decided: June 20, 2007

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Before JOSEPH F. RUGGIERO, HOWARD B. BLANKENSHIP,  
and JEAN R. HOMERE, *Administrative Patent Judges*.

HOMERE, *Administrative Patent Judge*.

DECISION ON APPEAL  
STATEMENT OF THE CASE

Appellants appeal under 35 U.S.C. § 134 from the Examiner's Final Rejection of claims 1 through 4, 6 through 13 and 15 through 29. Claims 5, 14 and 30 through 41 have been canceled. We have jurisdiction under 35 U.S.C. § 6(b) to decide this appeal.

Appellants invented an integrated circuit (IC) for a multi-function handheld device. Particularly, the handheld device comprises a processing module that, when connected to an external host computer, retrieves a first set of operational instructions for an extended memory mode to transfer files between the host computer and the memory of the handheld device. Alternatively, when the host is not connected to the handheld device, the processing module retrieves a second set of operational instructions to playback multimedia data stored in the memory of the handheld device. (Specification 3 and 4).

Claim 20 is illustrative and representative of the claimed invention. It reads as follows:

20. A method for a processing module of a handheld device to provide multiple functions, the method comprises:

detecting a first external condition;

retrieving a first set of operational instructions for an extended memory mode to transfer files between a host device and memory of the handheld device;

detecting a second external condition; and

retrieving a second set of operational instructions to playback multimedia data stored in the memory.

In rejecting the claims on appeal, the Examiner relied upon the following prior art:

Kikinis	US 5,793,957	Aug. 11, 1998
Ha	US 6,530,838 B2	Mar. 11, 2003
Anguilar	US 6,636,918 B1	Oct. 21, 2003

The Examiner rejected the claims on appeal as follows:

- A. Claims 20, 21, 23, 25, 26 and 28 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Kikinis.
- B. Claims 1 through 4, 6 through 9, 11 through 13, 15 through 17, 19, 22 and 27 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Kikinis and Ha.
- C. Claims 10, 18, 24 and 29 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Kikinis, Ha and Aguilar.

Appellants contend<sup>1</sup> that Kikinis does not anticipate claims 20, 21, 23, 25, 26 and 28. First, Appellants contend that, as evidenced in column 2, lines 25-32, Kikinis does not provide an enabling disclosure to disable the microcontroller such that it operates as a slave unit of the CPU. Similarly Appellants contend that Kikinis does not provide an enabling disclosure to automatically update data files, as evidenced in column 2, lines 49-53. (Br. 6 and 7.) In response, the Examiner contends that Appellants failed to show that the textual portions of Kikinis relied upon to reject the claims are not enabling. (Answer 9.)

Next, Appellants contend that Kikinis does not fairly teach or suggest a processing module for (1) upon detecting a first external condition, retrieving a first set of operational instructions for an extended memory

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<sup>1</sup> This decision considers only those arguments that Appellants submitted in the Appeal and Reply Briefs. 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, 69 USPQ2d 1453, 1458 (Fed. Cir. 2004). We have therefore not considered Appellants' previously submitted arguments, which are presently incorporated by reference in Appellants' Brief.

mode to transfer files between a host device and memory of the handheld device, and (2) upon detecting a second external condition, retrieving a second set of operational instructions to playback multimedia data stored in the memory when the handheld device is not connected to the host, as recited in representative claim 20. (Br. 8.) In response, the Examiner contends that Kikinis teaches the cited limitations, and therefore anticipates representative claim 20. (Answer 4 and 9.)

Additionally, Appellants contend that Kikinis taken in combination with either Ha and/or Aguilar does not render claims 1 through 4, 6 through 13, 15 through 19, 22, 24, 27 and 29 unpatentable. Particularly, Appellants contend that, among other things, neither Kikinis nor Ha nor Aguilar teaches the file transfer mode and playback mode, as claimed. (Br. 9 and 10.) The Examiner, in contrast, contends that both Ha and Aguilar complement Kikinis' teachings to yield the invention as recited in claims 2 through 6, 8 through 10 and 12 through 18. (Answer 5, 8 and 11.) Therefore, the Examiner concludes that it would have been obvious to one of ordinary skill in the art to combine the teachings of the cited references to render the cited claims unpatentable. (*Id.*)

We affirm.

## ISSUES

The *pivotal* issues in the appeal before us are as follows:

- (1) Have Appellants shown that the Examiner failed to establish that the disclosure of Kikinis anticipates the claimed invention under 35 U.S.C. § 102(b). Particularly, does Kikinis' disclosure of a personal directory assistant with a microcontroller that loads different programs to operate

in both a stand alone mode and a docking mode teach Appellants' file transfer mode and playback mode?

- (2) Have Appellants shown that the Examiner failed to establish that one of ordinary skill in the art, at the time of the present invention, would have found that the combined disclosures of Kikinis and Ha and/or Aguilar render the claimed invention unpatentable under 35 U.S.C. § 103(a)?

### FINDINGS OF FACT

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

#### The invention

1. Appellants invented an integrated circuit (12) for a multi-function handheld device (10). (Specification 3.)
2. As depicted in figure 1, when an external host computer (host device A, B or C) is connected to the handheld device (10) via a host interface (18), a processing module (20) in the handheld device retrieves a first set of operational instructions<sup>2</sup> for an extended memory mode to transfer files

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<sup>2</sup> With the multi-function handheld device 10 in the first functional mode, the integrated circuit 12 facilitates the transfer of data between the host device A, B, or C and memory 16, which may be non-volatile memory (e.g., flash memory, disk memory, SDRAM) and/or volatile memory (e.g., DRAM). In this mode, the processing module 30 retrieves a first set of operational instructions (e.g., a file system algorithm, which is known in the art) from the memory 16 to coordinate the transfer of data. (Specification 6.) If it is determined that the first external condition exists, the process proceeds to step 86 where the integrated circuit retrieves a first set of operational instructions to facilitate a first functional mode of operation for the handheld device. The first set of operational instructions may

between the host computer and the memory (16) of the handheld device via a memory interface (22). (*Id.* 6.)

3. Alternatively, when the host is not connected to the handheld device (10), the processing module (20) retrieves a second set of operational instructions to playback multimedia data<sup>3</sup> (34) stored in the memory (16) of the handheld device (10) via memory interface (22). (*Id.* 9.)

#### The Prior Art Relied upon

4. As depicted in Figure 3, Kikinis teaches a personal digital assistant (PDA) with a microcontroller (11), memory (13) and a host interface (14) for connecting the PDA with a host computer (Abstract, Col. 5, ll. 41-49.)

5. Kikinis teaches that, in stand alone mode when the PDA is not docked in the host unit, the microcontroller (11) acts as a CPU and retains full control of its internal bus structures. (Col. 5, ll. 29-31, Col. 9, ll. 53-56.)

6. Kikinis teaches that in stand alone mode, the microcontroller (11) loads operational instructions to retrieve applications and data stored in memory (13). These applications and data include databases, spreadsheets, travel files, documents, address and telephone records, and the like. (Col. 11, ll. 13-17.)

7. Kikinis teaches that, when the PDA is docked in the host unit, the microcontroller (11) acts as a slave unit surrendering control of its CPU to the CPU of the host computer. This enables the host computer to transfer

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correspond to a file system algorithm that facilitates the handheld device to function as a mass storage device for the host device. (Specification 16.)

<sup>3</sup> Appellants define multimedia data to include at least one of digitized audio data, digital video data and text data. (Specification 10.)

data and software into and out of the docked PDA memory. (Col. 5, ll. 31-38.)

8. Kikinis teaches that when the PDA is docked in the host unit, the PDA starts a pre-programmed POST procedure, which loads a bootstrap program to the RAM (68) of the PDA to retrieve codes for security matching, and to subsequently allow data transfer between the host computer and the PDA. (Col. 9, ll. 14-17 and Col. 10, ll. 15-22.)

## PRINCIPLES OF LAW

### 1. ANTICIPATION

It is axiomatic that anticipation of a claim under § 102 can be found only if the prior art reference discloses every element of the claim. *See In re King*, 801 F.2d 1324, 1326, 231 USPQ 136, 138 (Fed. Cir. 1986) and *Lindemann Maschinenfabrik GMBH v. American Hoist & Derrick Co.*, 730 F.2d 1452, 1458, 221 USPQ 481, 485 (Fed. Cir. 1984).

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, 77 USPQ2d 1321, 1325-26 (Fed. Cir. 2005), citing *Minn. Mining & Mfg. Co. v. Johnson & Johnson Orthopaedics, Inc.*, 976 F.2d 1559, 1565, 24 USPQ2d 1321, 1326 (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, 51 USPQ2d 1943, 1945 (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).

## 2. OBVIOUSNESS

### OBVIOUSNESS (Prima Facie)

The Supreme Court in *Graham v. John Deere*, 383 U.S. 1, 17-18, 148 USPQ 459, 467 (1966), stated that three factual inquiries underpin any determination of obviousness:

Under § 103, (1) the scope and content of the prior art are to be determined; (2) differences between the prior art and the claims at issue are to be ascertained; and (3) the level of ordinary skill in the pertinent art resolved. Against this background, the obviousness or nonobviousness of the subject matter is determined. Such secondary considerations as commercial success, long felt but unsolved needs, failure of others, etc., might be utilized to give light to the circumstances surrounding the origin of the subject matter sought to be patented. As indicia of obviousness or nonobviousness, these inquiries may have relevancy.

In rejecting claims under 35 U.S.C. § 103, the Examiner bears the initial burden of establishing a prima facie case of obviousness. *In re Oetiker*, 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992). *See also In re Piasecki*, 745 F.2d 1468, 1472, 223 USPQ 785, 788 (Fed. Cir. 1984). Where the claimed subject matter involves more than the simple substitution 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 must be based on “an apparent reason to combine the known elements in the fashion claimed.” *KSR Int’l v. Teleflex, Inc.*, 127 S. Ct. 1727, 1740-41, 82 USPQ2d 1385, 1396 (2007). That is, “there must be

some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness.” *Id.*, 127 S. Ct. at 1741, 82 USPQ2d at 1396 (quoting *In re Kahn*, 441 F.3d 977, 987, 78 USPQ2d 1329, 1336 (Fed. Cir. 2006)). Such reasoning can be based on interrelated teachings of multiple patents, the effects of demands known to the design community or present in the marketplace, and the background knowledge possessed by a person having ordinary skill in the art. *KSR*, 127 S. Ct. at 1740-41, 82 USPQ2d at 1396. Only if this initial burden is met does the burden of coming forward with evidence or argument shift to the Appellant. *Oetiker*, 977 F.2d at 1445, 24 USPQ2d at 1444. *See also Piasecki*, 745 F.2d at 1472, 223 USPQ at 788. Thus, the Examiner must not only assure that the requisite findings are made, based on evidence of record, but must also explain the reasoning by which the findings are deemed to support the Examiner’s conclusion.

## ANALYSIS

### A. 35 U.S.C. § 102(b) REJECTION

As set forth above, representative claim 20 requires, upon detecting a first external condition, a processing module of the handheld device retrieves a first set of operational instructions for an extended memory mode to transfer files between a host device and memory of the handheld device. As detailed in the findings of fact section above, we have found that Kikinis teaches that, upon the PDA being docked to the host, the microcontroller of the PDA retrieves a bootstrap program to verify a host access code before the host can subsequently transfer files between the PDA memory and the host. (Finding of Fact 8.) We find that the PDA microcontroller disclosed

in Kikinis performs the same functions as the claimed processing module of the handheld device. Particularly, we find that by loading the bootstrap program to verify the host codes before allowing the file transfer, Kikinis' microcontroller teaches retrieving the claimed operational instructions to allow transfer of files when the PDA microcontroller becomes a slave unit of the host CPU.

Further, as set forth above, representative claim 20 also requires, upon detecting a second external condition, retrieving a second set of operational instructions to playback multimedia data stored in the memory when the handheld device is not connected to the host. As detailed in the findings of fact section above, we have found that Kikinis discloses, in the stand alone mode, the microcontroller retrieves data stored in the memory of the PDA. (Findings of Fact 6.) We find that by disclosing that the microcontroller retrieves applications data when the PDA is in stand alone mode, Kikinis teaches retrieving the claimed second set of operational instructions to playback multimedia data. Particularly, we find that Kikinis' disclosure of retrieving documents, address and telephone records teaches the claimed retrieval of multimedia data since Appellants' Specification defines multimedia data to include text.<sup>4</sup>

Additionally, we are not persuaded by Appellants' argument that Kikinis' disclosure is not enabling as it pertains to matters discussed in the background of the invention in the Kikinis reference. We find that Appellants' arguments fail to particularly show that the textual portions the Examiner relied upon in the rejection are not enabling. As discussed in the finding of facts section above, Kikinis appears to have brought about a

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<sup>4</sup> *Id.*

solution to these problems previously raised in the background of the invention.

In light of these findings, it is our view that Kikinis teaches the cited limitations of representative claim 20. It follows that the Examiner did not err in rejecting claim 20 as being anticipated by Kikinis.

Appellants did not provide separate arguments with respect to the rejection of dependent claims 21, 23, 25, 26 and 28 as being anticipated by Kikinis. Therefore, they fall together with representative claim 20. *See In re Young*, 927 F.2d 588, 590, 18 USPQ2d 1089, 1091 (Fed. Cir. 1991). *See also* 37 C.F.R. § 41.37(c)(1)(vii).

#### B. 35 U.S.C. § 103(a) REJECTION

Now, we turn to the rejection of claims 1 through 4, 6 through 10, 11 through 13, 15 through 19, 22, 24 and 29 as being unpatentable over Kikinis in combination with Ha and/or Aguilar. We note that Appellants merely reiterate the same arguments addressed above in the discussion of representative claim 20. As discussed above, we find that Kikinis teaches the claimed file transfer mode and the playback mode. Therefore, we do not find any deficiencies in Kikinis for Ha or Aguilar to cure. In light of these findings, it is our view that one of ordinary skill in the art would have found it obvious to combine the teachings of Kikinis with Ha and/or Aguilar to yield the invention as claimed. Therefore, it follows that the Examiner did not err in rejecting 1 through 4, 6 through 13, 15 through 19, 22, 24, 27 and 29 as being unpatentable over the combination of Kikinis with Ha or Aguilar.

### CONCLUSION OF LAW

On the record before us, Appellants have not shown that the Examiner has failed to establish that Kikinis anticipates claims 20, 21, 23, 25, 26 and 28 under 35 U.S.C. § 102(b). Additionally, Appellants have not shown that the Examiner has failed to establish that the combination of Kikinis with Ha or Aguilar renders 1 through 4, 6 through 13, 15 through 19, 22, 24, 27 and 29 unpatentable under 35 U.S.C. § 103(a).

### DECISION

We have affirmed the Examiner's decision rejecting claims 1 through 4, 6 through 13 and 15 through 29.

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

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