

The opinion in support of the decision being entered today is not binding precedent of the Board.

Paper No. 14

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte LAVAUGHN F. WATTS, JR., KEVIN D. DAVIS,
ROBERT E. TONSING, TOM GRIMM,
LARRY MITCHAM, ROBERT MOORE, and GARY VERDUN

Appeal No. 1997-3423
Application 08/336,134¹

ON BRIEF

Before THOMAS, MARTIN, and HECKER, Administrative Patent Judges.

MARTIN, Administrative Patent Judge.

DECISION ON APPEAL

This is an appeal under 35 U.S.C. § 134 from the examiner's final rejection of claims 1-10 and 12-28, all of the pending claims, under 35 U.S.C. § 102(e). We affirm-in-part.

¹ Application for patent filed November 8, 1994.

A. The invention

The invention is a computer docking system having means for customizing a hardware configuration in the docking system for optimum performance. Appellants' brief states (at 4-5) that this customizing function is carried out in their docking system by a menu-driven program called SETDOCK. The specification explains (at 28) that "SETDOCK is a configuration utility developed for the Docking System environment that customizes the desktop hardware configuration for maximum performance. SETDOCK must run anytime docking system hardware is added or removed or port settings are to be changed." The specification further states (at 46) that "[t]he SETDOCK feature goes in and programs common hardware in any docking station and configures communication ports on the portable computer. SETDOCK also tells the portable computer what kind of docking station it has connected to."

Figures 38-40 respectively show the main, second, and third screens of the SETDOCK program. As shown by the table bridging pages 30-31 of the specification, the Figure 38 screen permits selection of the type of floppy drive, swapping of floppy drives, and turning on or off of the following

features: a game port; a QuickPort mouse; SCSI hardware; SCSI BIOS; PCMCIA² hardware; and PCMCIA BIOS.

The Figure 39 screen permits selection of the communication ports (COM1, COM2, COM3, or N/A) for various connectors ("Notebook 9 Pin Serial," "Notebook Internal," "Station 9 Pin Serial," and "Station 25 Pin Serial") for each of the following computer arrangements: "Notebook Only"; "MicroDock & Notebook"; and "DeskTop & Notebook." As shown in the table bridging pages 31-32 of the specification, the available configurations for "Notebook Only" are "1 thru 3" and "Custom," for "MicroDock & Notebook" are "1 thru 5" and "Custom," and for "DeskTop & Notebook" are "1 thru 6" and "Custom." The last line of page 31 explains that the asterisks in the table mean the communication port numbers are automatically set based on the selected configuration number unless "Custom" is selected. Figure 39 shows the port assignments when configuration "1" is selected for all three computer arrangements.

² Incorrectly identified as "PCMIA" hardware in the table.

The Figure 40 screen permits selection of the addresses for the LPT1 and LPT2 printer ports. The table at page 32 explains that the available configurations for "Notebook Only," "MicroDock & Notebook," and "DeskTop & Notebook" are, respectively, "1 thru 4," "1 thru 2," and "1 thru 2." No "Custom" option is provided. Asterisks indicate that the communication port numbers are automatically set based on the selected configuration number. **B. The claims**

The independent claims are claims 1, 10, and 19, of which claim 19, which is representative, reads as follows:

19. A method of connecting a portable computer to a docking station in a docking system, comprising:

physically and electrically connecting said portable computer to said docking station; and

customizing a hardware configuration in the docking system for optimum performance.

The terms "customizing," "hardware configuration," and "optimum" are not defined in the specification and therefore must be given their broadest reasonable interpretations consistent with appellants' disclosure. In re Morris, 127 F.3d 1048, 1054, 44 USPQ2d 1023, 1027 (Fed. Cir. 1997).

"Customize" is defined in Webster's Third New International

Dictionary of the English Language 560 (Unabridged ed., 1971) to mean "to build, fit, or alter according to individual specifications," and "optimize" is defined to mean "to make as perfect, effective, or functional as possible" (id. at 1585) (copies enclosed). Although the term "hardware configuration" does not appear in the Academic Press Dictionary of Science and Technology, which can be found on-line at <http://www.harcourt.com/dictionary/def>,³ "configuration" is defined therein as follows (copy enclosed): "*Computer Technology*. the relationship of the hardware components of a computer system with each other, together with the electronic interconnectivities."

C. The reference and rejection

The sole reference relied on is:

Swindler et al. (Swindler) 5,313,596 May 17,
1994

Claims 1-10 and 12-28 stand rejected under 35 U.S.C.
§ 102(e) as anticipated by Swindler.

³ This site can reached via the following PTO web site:
<http://ptoweb/patents/siradmin/stic/sticnp>.

D. The merits of the rejection

Anticipation under 35 U.S.C. § 102 requires that each element of the claim in issue be found, either expressly described or under principles of inherency, in a single prior art reference. In re King, 801 F.2d 1324, 1327, 231 USPQ 136, 138 (Fed. Cir. 1986). To be inherent, a feature must necessarily be present. In re Robertson, 169 F.3d 743, 745, 49 USPQ2d 1949, 1950-51 (Fed. Cir. 1999).

Swindler's Figure 1 shows a notebook computer 12 for insertion into a docking station 14, which is connected to an external monitor 48, an external keyboard 50, and a mouse 52. As shown in Figure 6, the docking station also includes two floppy disc drives 72 and 74, a hard disc drive 88, and a system planar board 90 (col. 11, lines 42-45) and also a connector portion 44a (Fig. 6) for mating with connector portion 44 (Fig. 3) on the notebook computer (col. 14, lines 4-9). When these connector portions have been successfully interengaged, interconnection is provided between the notebook computer 12, the external peripheral devices 48, 50, and 52 and the docking station drives 72, 74, and 88 (col. 26, lines 33-38).

Referring to Figure 24, the system planar board 90 includes, inter alia, a microcontroller 232, an electrically programmable read only memory (or "EPROM") 234, and a static random access memory (or "SRAM") 236 (col. 19, line 54 to col. 20, line 1). In contrast to the motherboard contained in the notebook computer, the system planar board 90 does not provide full computer processing control; rather, its purpose is to

control the operation of the . . . motorized docking system, control the energization of the notebook computer 12 and selected operating components of the docking station 14 to prevent potentially damaging voltage mismatches, provide an operative interface between the internal operating components in the docking station and notebook computer, and link the docked notebook computer to the docking station drives 72,74,88 and the external peripheral devices 48,50 and 52. [Emphasis added.] [Col. 11, lines 50-63.]

The examiner contends (albeit for the first time in the Answer, at 4) that this "operative interface"

must have been configured[] (at some time) for the hardware to properly communicate between docking units. Also, in the design of the docking system the designer would have selected optimal options and criteria so that the best possible docking system would have been achieved. Swindler et al. wholly anticipates properly interfacing between docking units and optimal performance would have been expected from their system.

The examiner further also explains for the first time in the Answer (at 4-5) that appellants' SETDOCK system

is similar to all BIOS[[]basic input/output system) programs used by all computers to configure their operating system prior to operator use. The SETDOCK routine sets up items such as communication ports, I/O ports, printer ports, and other hardware needs so that the system functions correctly internally and externally. There is no novelty in presetting a computer[']s operative characteristics prior to allowing an operator to input requests. Most computers in use today are booted by a ROM or EPROM program stored in memory which exclusively sets up which environment the computer will operate in. In IBM or compatible systems[,] programs, such as[] CONFIG.SYS, AUTOEXEC.BAT, and COMMAND.COM[,] are booted prior to computer usage in order to initialize the computer's operating system. Moreover, the ROM or EPROM programming may be customized by the operator if the system would have had a recent hardware/software upgrade or previously unused port activated. The appellant[s'] claimed invention does not comprise any limitation or inventive step over the applied reference because Swindler's computer must, like most computers, be configured to function optimally in its operating environment. [Answer at 5.]

In our view, the foregoing arguments for inherent anticipation, which have not been addressed by appellants (who did not file a reply brief), are sufficiently strong to shift the burden to appellants to demonstrate that inherency is lacking, which they have made no attempt to do. See King, 801 F.2d at 1327, 213 USPQ at 138-139:

[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 Swinehart, 439 F.2d 210, 212-13, 169 USPQ 226, 229 (CCPA 1971). Accord In re Fitzgerald, 619 F.2d 67, 70, 205 USPQ 594, 596 (CCPA 1980), quoted with approval in In re Thorpe, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985); In re Best, 562 F.2d 1252, 1255, 195 USPQ 430, 433-34 (CCPA 1977); In re Ludtke, 441 F.2d 660, 664, 169 USPQ 563, 566 (1971).

Moreover, we note that the examiner's arguments for inherency find additional support in the fact that the preferred embodiment of Swindler's notebook computer, like appellants' (see Fig. 4⁴), has a pair of PCMCIA (Personal Computer Memory Card

International Association⁵) slots for receiving PCMCIA cards (col. 6, lines 39-52). The on-line TechEncyclopedia discussion of such cards,⁶ also known as "PC Cards," describes

⁴ These card slots are mentioned at page 6, line 20 of appellants' specification.

⁵ The meaning of PCMCIA is given in Swindler at column 10, lines 22-27.

⁶ See www.techweb.com/encyclopedia/defineterm?term=PC+Card= (copy enclosed).

the functions performed by these cards and explains that they can be used only after loading of programs called "Card Services" and "Socket Services," which appear to be hardware configuration programs:

PC Card

A credit-card sized, removable module for portable computers standardized by PCMCIA. PC Cards are also known as "PCMCIA cards." PC Cards are 16-bit devices that are used to attach modems, network adapters, sound cards, radio transceivers, solid state disks and hard disks to a portable computer. The PC Card is a "plug and play" device, which is configured automatically by the Card Services software (see below).

. . . .

Card and Socket Services

In order to use a PC Card slot in the computer, Card and Socket services must be loaded, typically at system startup. Card and Socket Services software is generally included with laptops that have PC Card slots. It also comes packaged with PC Cards.

Card Services manage system resources required by the PC Card, and, on PCS, determines which IRQs and memory and I/O addresses are assigned. They also manage hot swapping and pass changes in events to higher-level drivers written for specific cards.

Card Services talk to Socket Services, which is the lowest level of software that communicates directly with the PC Card controller chips. Socket Services can be built into the system BIOS or added via software.

The foregoing TechEncyclopedia discussion suggests that Swindler's docking system necessarily includes software like Card Services and Socket Services for configuring the hardware so that the notebook computer can communicate with all of the hardware components in the docking system, which clearly constitutes "customizing a hardware configuration . . . for optimum performance," as required by each of the independent claims.⁷ Furthermore, the fact that Swindler's PCMCIA slots are provided to permit insertion of one or two cards into the notebook computer after the notebook computer has been docked in the docking station (col. 11, lines 29-33) implies that the software is capable of accommodating the addition of new hardware (e.g., a modem) by the user.

In the absence of any proof of noninherency, we are constrained to affirm the § 102 rejection of independent

⁷ Because we are relying on the TechEncyclopedia discussion entry to show that software like Card Services and Socket Services is inherently part of Swindler's docking system, our reliance on TechEncyclopedia is consistent with the basis of the rejection, which is anticipation by Swindler. See In re Samour, 571 F.2d 589, 562, 197 USPQ 1, 4 (CCPA 1978) (the PTO, in making a rejection under 35 U.S.C. § 102 on a single prior art reference that discloses every material element of the claimed subject matter, can properly rely on additional references for that purpose).

claims 1, 10, and 19 and dependent claims 3 and 12, which appellants treat as standing or falling with claims 1 and 10, respectively (Brief at 3).

The rejection is affirmed with respect to dependent claims 4 and 13 on the ground that they are not separately argued. Appellants' explanation (Brief at 6 and 9-10) of what these claims recite is not a separate argument. See 37 CFR § 1.192(c)(7) (1995) ("Merely pointing out differences in what the claims cover is not an argument as to why the claims are separately patentable.").

Turning now to the remaining dependent claims, claim 2 specifies that the means for customizing the hardware configuration is capable of customizing common hardware in various docking stations. This rejection is affirmed, because appellants have not explained why Swindler's configuration software does not inherently have this capability. For the same reason, the rejection of similar claim 20 is affirmed.

Claim 5 recites, inter alia, first drive means for driving the tray and the portable computer "into and out of" the housing. Appellants' Figure 3 shows portable computer 13 and tray 39 in their "out of" the housing positions. The

rejection of claim 5 is reversed because Swindler's travel plate (i.e., tray) 108 does not extend from the housing even when it is in the ejection position shown in Figure 20D (col. 14, lines 49-50). Consequently, the rejection of dependent claims 6-8, which depend on claim 5, is also reversed. For the same reason as claim 5, the rejection of similar claim 14 and its dependent claims 15-17 is reversed.

Claim 9 specifies that the means for customizing is a configuration utility developed for the docking system environment. The rejection of this claim and similar claim 18 is affirmed for the reasons given above with respect to the independent claims.

The rejection of claim 21, which calls for customizing a hardware configuration in the portable computer, is affirmed because, as already noted, Swindler's hardware configuration software is capable of accommodating new PCMCIA cards inserted into the notebook computer after it has been docked in the docking station. For the same reason, the rejection of similar claim 26 is affirmed.

The rejection of claim 22, which calls for customizing a hardware configuration in the docking station, is affirmed

because appellants have not shown that the configuration software used by Swindler to accommodate newly inserted PCMCIA cards would not inherently be capable of accommodating a change of hardware (e.g., replacement of hard disc drive 88) in the docking station. For the same reason, we are affirming the rejection of similar claim 27.

For the reasons given with respect to claims 21 and 22, we are sustaining the rejection of claims 23 and 28, which call for customizing a hardware configuration in the portable computer and the docking station.

The rejection of claim 24, which specifies that the means for customizing is a configuration utility that is run anytime docking system hardware is added or removed or port settings are to be changed, is affirmed for the reasons already discussed. In summary, the § 102 rejection is affirmed with respect to claims 1-4, 9, 10, 12, 13, and 18-28 and is reversed with respect to claims 5-8 and 14-17.

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

AFFIRMED-IN-PART

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JAMES D. THOMAS)	
Administrative Patent Judge)	
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)	BOARD OF PATENT
JOHN C. MARTIN))
Administrative Patent Judge)	APPEALS AND
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