THIS OPINION WAS NOT WRITTEN FOR PUBLICATION

The opinion in support of the decision being entered today (1) was not written for publication in a law journal and (2) is not binding precedent of the Board.

Paper No. 24

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte MARK B. DUFF

Appeal No.1998-0073
Application 08/273,813

HEARD: MARCH 9, 2000

Before HAIRSTON, FLEMING, and DIXON, **Administrative Patent Judges**.

FLEMING, **Administrative Patent Judge**.

DECISION ON APPEAL

This is a decision on appeal from the final rejection of claims 1 through 9, 11, 12, 15 through 17, and 21 through 25. Claims 10, 13, 14, 18 through 20, and 26 have been allowed by the Examiner. An amendment after final rejection was filed August 29, 1996, canceling claims 21 through 23 and amending claims 1 through 3 and 25 which was entered by the Examiner as

stated in the Advisory Action mailed September 12, 1996. Therefore, the objections to the specification under 35 U.S.C. § 112, first paragraph, and the rejection of claims 1 through 3, 5 through 9, 11, 12, 15 through 17, 22, and 25 under 35 U.S.C. § 112, second paragraph, have been overcome.

The invention is directed generally to a portable and waterproof computer having a clam shell case and more specifically, to a computer with a sealant between the top and the bottom portions. The computer is sealed from the outside environment by the sealant when the top and the bottom portions are closed. A handle and stabilizing strips are also attached to the outside of the bottom housing.

Representative independent claim 1 is reproduced as follows:

1. A portable computer including a keyboard and a display, and comprising:

a clam shell case comprising:

hinges;

a bottom housing comprising a battery pack and an interior surface containing the keyboard;

a top housing containing the display, one end of said top housing being connected to a corresponding end of said bottom housing by the hinges; and

a sealant, placed continuously between the bottom housing and the top housing when the top housing is closed against the bottom housing, to seal the portable computer, wherein the sealant is malleable and compresses when the top housing is closed against the bottom housing.

The Examiner relies on the following references:

Chang	4,839,837	June 13, 1989
Hsieh	4,926,365	May 15, 1990
Chadima, et al. (Chadima)	5,023,824	June 11, 1991
Katz	5,336,848	Aug. 9, 1994 (Filed Aug. 24, 1993)
Bird	5,341,154	Aug. 23, 1994 (Filed Dec. 27, 1991)

Claims 1 through 3, 5, 6, 11, 16, 24, and 25 stand rejected under 35 U.S.C. § 103 as being unpatentable over Hsieh and Chadima. Claims 7, 8, 12, and 17 stand rejected under 35 U.S.C. § 103 as being unpatentable over Hsieh, Chadima, and Katz. Claim 9 stands rejected under 35 U.S.C. § 103 as being unpatentable over Hsieh, Chadima, Katz, and Chang. Claim 15 stands rejected under 35 U.S.C. § 103 as being unpatentable over Hsieh, Chadima, and Bird. Claim 4 stands rejected under 35 U.S.C. § 103 as being unpatentable over Hsieh and Katz.

Rather than repeat the arguments of Appellant and the Examiner, we make reference to the briefs[1] and the answer for the details thereof.

OPINION

It is our view, after careful review of the evidence before us, that claims 2 through 4 are properly rejected under 35 U.S.C. § 103. We reach the opposite conclusion with respect to claims 1, 5 through 9, 11, 12, 15 through 17, 24, and 25. Accordingly, we affirm-in-part.

Turning to the rejection of claims 1, 5, 6, 11, 16, 24, and 25 under 35 U.S.C. § 103, Appellant argues on page 10 of the brief that neither Hsieh nor Chadima teaches Appellant's inventive concept which is directed to a clam shell portable computer with a malleable sealant between the top and the bottom housing as defined in independent claims 1, 3, and 24. Appellant on pages 11, 12, and 15 points out that Chadima's top and bottom housings remain closed with the sealant permanently installed in between during the operation of the

[1] Appellant filed an appeal brief on February 28, 1997. Appellant also filed a reply brief on June 16, 1997. On July 3, 1997, the Examiner mailed a communication stating that the reply brief has been entered and considered.

portable computer. Appellant further argues that Chadima's sealed housing cannot be used for sealing Hsieh's clam shell computer.

With respect to claims 1, 5 through 9, 11, 12, 15 through 17, 24, and 25, the Examiner has failed to set forth a ***prima facie*** case. It is the burden of the Examiner to establish why one having ordinary skill in the art would have been led to the claimed invention by the express teachings or suggestions found in the prior art, or by implications contained in such teachings or suggestions. ***In re Sernaker***, 702 F.2d 989, 995, 217 USPQ 1, 6 (Fed. Cir. 1983). "Additionally, when determining obviousness, the claimed invention should be considered as a whole; there is no legally recognizable 'heart' of the invention." ***Para-Ordnance Mfg. v. SGS Importers Int'l, Inc***., 73 F.3d 1085, 1087, 37 USPQ2d 1237, 1239 (Fed. Cir. 1995), ***cert. denied***, 519 U.S. 822 (1996) ***(citing W.L. Gore & Assoc., Inc. v. Garlock, Inc.***, 721 F.2d 1540, 1548, 220 USPQ 303, 309 (Fed. Cir. 1983), ***cert. denied***, 469 U.S. 851 (1984)).

The Examiner on page 4 of the answer states that Chadima teaches the placing of a sealing gasket that is malleable and

compresses between the top and bottom housings to form a “water tight housing” and a “sealed environment within the housing.” The Examiner further points out that it would have been obvious to one of ordinary skill in the art to modify the portable computer of Hsieh with the sealing gasket of Chadima.

The Federal Circuit states that "[t]he mere fact that the prior art may be modified in the manner suggested by the Examiner does not make the modification obvious unless the prior art suggested the desirability of the modification." ***In re Fritch***, 972 F.2d 1260, 1266 n.14, 23 USPQ2d 1780, 1783-84 n.14 (Fed. Cir. 1992)(***citing In re Gordon***, 733 F.2d 900, 902, 221 USPQ 1125, 1127 (Fed. Cir. 1984)). The Federal Circuit reasons in ***Para-Ordnance Mfg. Inc. v. SGS Importers Int’l Inc.***, 73 F.3d 1085, 1088-89, 37 USPQ2d 1237, 1239-40 (Fed. Cir. 1995), ***cert. denied***, 519 U.S. 822 (1996), that for the determination of obviousness, the court must answer whether one of ordinary skill in the art who sets out to solve the problem and who had before him in his workshop the prior art, would have been reasonably expected to use the solution that is claimed by the Appellants.

Chadima teaches in col. 13, lines 54 through 64 and Fig. 17 that the gasket 100 seals the top and the bottom housing portions 41 and 42 and is permanently held in place with the fasteners 101. Chadima further shows the display 14 and the keyboard 12 on the exterior surface of the top housing. Therefore, we find that Chadima teaches a portable computer with top and bottom housings where the display and the keyboard are on the outside surface of the top housing and are accessible without opening the top and the bottom housings once they are permanently sealed in closed position.

In view of these teachings, we find that Chadima is concerned with permanently sealing a portable computer and forming a sealed unit with the display and the keyboard on the exterior of the top housing which is not opened during its operation. Chadima is not addressing the problem of sealing a computer housing with two parts which open and close against one another as taught by Hsieh. Therefore, we fail to find any suggestion or desirability of placing Chadima's sealant in between Hsieh's top and bottom housings of a clam shell computer. Accordingly, we reverse the rejection of claims 1, 5 through 9, 11, 12, 15 through 17, 24, and 25.

Turning to the rejection of claim 2, Appellant argues on pages 15 and 16 that Chadima teaches an end cap for sealing a data communication port. Appellant further argues, on pages 20 and 21, that Chadima's end cap is sealed from the housing using an O-ring by securing connectors to the housing. On page 3 of the reply brief, Appellant adds that the invention as in claim 2 is not implemented using "end caps" made of metal, but with detachable port covers form-fitted to respective ports by being made of "soft rubber."

The Examiner responds to Appellant's arguments on pages 3 and 4 of the answer by stating that Hsieh teaches a clam shell case with the top and the bottom housings connected by hinges while Chadima teaches the sealing of external ports using a sealing gasket to environmentally seal a portable computer. In particular, the Examiner points to the abstract of Chadima that teaches a "water tight housing" and a "sealed environment within the housing" for a portable computer. The Examiner further argues that Chadima uses O-rings which can be made of different materials such as rubber.

As pointed out by our reviewing court, we must first determine the scope of the claim. "[T]he name of the game is

the claim." ***In re Hiniker Co.***, 150 F.3d 1362, 1369, 47 USPQ2d 1523, 1529 (Fed. Cir. 1998). Claims will be given their broadest reasonable interpretation consistent with the specification, and limitations appearing in the specification are not to be read into the claims. ***In re Etter***, 756 F.2d 852, 858, 225 USPQ 1, 5 (Fed. Cir. 1985).

We note that Appellants' claim 2 recites

> [a] portable computer including a keyboard and a display, and comprising: a clam shell case comprising: hinges; a bottom housing comprising a battery pack and an interior surface containing the keyboard; a top housing containing the display,. . . at least one external port located within the bottom housing; and at least one port sealing unit corresponding to and selectively sealing said at least one external port, wherein the at least one port sealing unit comprises soft rubber.

Appellant's claim 2, in addition to "a clam shell case," recites "at least one external port located within the bottom housing" and "one port sealing unit corresponding to and selectively sealing said at least one external port." We find that the external port and the sealing unit of Appellant's claim 2 merely require that one external port be located in the bottom housing and be selectively sealed. The claim requires neither any particular form of sealing of the

external port nor a form-fitted cover for the port. Hsieh clearly teaches a clam shell configuration in col. 3, lines 15 through 27 and Fig. 2 and hinges are shown at the location where the cover is attached to the bottom housing and where a battery pack is attached to its back. Hsieh in col. 5, lines 23 through 27 further discloses external ports in the bottom housing for connection with peripheral devices. Chadima in col. 14, lines 8 through 14 teaches the connection of connectors 93 and 94 via the end cap 95 to the housing where an O-ring 106 which is usually made of rubber and a gasket 109 seal the external ports 108. Chadima in col. 14, lines 20 through 23 indicates that the completion of the above assembly seals off the data terminal from the environment. We conclude that Hsieh teaches the clam shell portable computer with an external port in the bottom housing while Chadima's end cap 95, O-ring 106, and gasket 109 together form a "port sealing unit" which seals the external ports 108.

Chadima is concerned with sealing the housing of a portable computer and sealing off the external ports from the outside environment such as dust and moisture. In particular, Chadima in col. 3, lines 1 through 9 discloses:

> But even while being carried about, many practical work environments for hand-held data terminals seem to subject the terminals to greater hazards than a typical office computer environment. For example, the terminals are likely to be used in dusty warehouses. The terminals may also be affected by inclement weather conditions in conjunction with certain outdoor uses, such as at airports or in truck yards. The desirability of rugged and weather resistant terminals seems apparent (emphasis added).

Hsieh's computer is also portable which allows the user to carry it to different locations other than a controlled office environment and subject the computer to adverse conditions such as those addressed above by Chadima. Therefore, we find that the Examiner has provided sufficient reason for one of ordinary skill in the art to combine a reference providing a sealing unit with Hsieh's external ports in the bottom housing of a portable computer. Since Appellant's claim 2 does not preclude external ports that are sealed using rubber O-rings and gaskets, we affirm the Examiner's rejection of claim 2 under 35 U.S.C. § 103 over Hsieh and Chadima.

In regard to the rejection of claim 3, Appellant on page 21 of the brief and page 5 of the reply brief argues that Chadima's handle is a resilient strap for holding the computer by the user. Appellant adds that Hsieh does not disclose a "multiple-mounting" handle as recited in claim 3. Appellant

specifically points to the recitation of a “multiple-mounting” handle on page 9, lines 20 through line 2 of page 10, page 11, lines 10 through 13, and Figs. 1 and 5. Appellant further argues that Hsieh in Fig. 1 shows the handle connected to the top of the computer and not to the bottom housing.

The Examiner argues on page 4 of the answer that Hsieh does show a portable computer with a “multiple-mounting” handle. The Examiner on page 5 of the answer specifically points out that Hsieh’s handle is “multiple-mounting” in the sense that it has mounts on both ends.

Appellant's claim 3, in addition to the "clam shell case" and a "battery pack in the bottom housing," recites "at least one multiple-mounting handle attached to the bottom housing." After a review of the specification, particularly page 4, lines 5 through 9, page 9, lines 20 through line 2 of page 10, and page 11, lines 10 through 13, we fail to find a clear definition for a "multiple-mounting" handle other than what it reasonably means to one of ordinary skill in the art. The specification only suggests that the handle may be attached to different sides of the bottom portion. Appellant also points to Figs. 1 and 5 for the handle configuration as in claim 3 which is depicted merely as a handle attached at its two ends to the bottom housing. We therefore find that Appellant's claim 3 only requires a handle attached at both ends to different locations of the bottom housing of a portable computer.

Hsieh, in addition to a clam shell portable computer with a battery pack in the bottom housing, clearly teaches in col. 3, lines 31 through 34 and in Figs. 2 and 7 the handle 5 mounted at its both ends on the front side of the bottom housing. Chadima

in Figs. 16 and 17 also teaches the handle 30 attached to the bottom housing of a portable computer using fasteners 85 and 86. Both Hsieh and Chadima show handles mounted at both ends which are therefore multiple-mounting.

Chadima is concerned with the specific location of the handle for ease of handling and transportation which is comparable to Hsieh's rationale for providing a handle on the front side for holding and carrying the computer. We conclude that the Examiner has provided sufficient reason for one of ordinary skill in the art to combine Chadima's portable computer having a different location for the handle with Hsieh's clam shell computer having a multiple-mounting handle attached to the front side of the bottom housing. Because Appellant's claim 3 does not require a particular handle other than one that is mounted on its two ends at different locations on the bottom housing, we affirm the Examiner's rejection of claim 3 under 35 U.S.C. § 103 over Hsieh and Chadima.

In regard to the rejection of claim 4, Appellant argues on pages 28 and 29 of the brief that Katz teaches a separate

stabilizing tray from the portable computer. Appellant further states that Katz uses VELCRO to attach the computer to the tray where claim 4 requires stabilizing strips on the exterior surface of the bottom housing.

The Examiner on page 6 of the answer responds to Appellant’s arguments by stating that it would have been obvious to one of ordinary skill in the art to add the stabilizing strips to the bottom of Hsieh’s computer. The Examiner further argues that stabilizing strips are known means to prevent slippage and Katz teaches adding such means to the bottom of a portable computer.

Claim 4 in addition to the “clam shell case” and an "exterior surface on which the portable computer rests," merely requires “stabilizing strips located on said exterior surface.” We find that Katz teaches the addition of means to prevent slippage to the bottom of the portable computer. Katz discloses in col. 3, lines 22 through 27 and in col. 4, lines 53 through 55 that VELCRO strips may be affixed to the computer and the tray to hold it in place. We find that Katz is concerned with stabilizing a portable computer while it is being used and

provides means to be attached to the bottom housing to stabilize the computer and prevent it from moving. Katz does not disclose any specific location for the stabilizing strips. However, VELCRO strips were common means for removably attaching and stabilizing objects to any surface such as signs to partition walls, name-tags to clothes, and speakers to the sides of computer monitors. The VELCRO strips are usually placed on the side on which the object rests. Thus, we find that it would have been reasonable to attach stabilizing strips to the bottom surface of the Katz' computer.

Katz is concerned with stabilizing a portable computer by attaching stabilizing means to the computer housing to prevent slippage which would have been applicable to Hsieh's portable computer. In view of the analysis above, we find that the Examiner has provided sufficient reason for one of ordinary skill in the art to combine a reference teaching stabilizing strips on the exterior surface of the bottom housing with Hsieh's clam shell portable computer. Therefore, we affirm the Examiner's rejection of claim 4 under 35 U.S.C. § 103 over Hsieh and Katz.

In view of the forgoing, the decision of the Examiner rejecting claims 1, 5 through 9, 11, 12, 15 through 17, 24, and 25 under 35 U.S.C. § 103 is reversed. The decision of the Examiner rejecting claims 2 through 4 under 35 U.S.C. § 103 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).

AFFIRMED-IN-PART

KENNETH W. HAIRSTON Administrative Patent Judge	)
MICHAEL R. FLEMING Administrative Patent Judge	) BOARD OF PATENT) APPEALS AND) INTERFERENCES
JOSEPH L. DIXON Administrative Patent Judge	)

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