

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opinion in support of the decision being entered today (1) was not written for publication in a law journal and (2) is not binding precedent of the Board.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. 34

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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Ex parte WILLIAM D. DALKE and GARY A. GRUSZECKI

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Appeal No. 1998-2381  
Application No. 08/304,725<sup>1</sup>

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ON BRIEF

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Before, COHEN, ABRAMS and GONZALES, Administrative Patent Judges

GONZALES, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on an appeal from the examiner's final rejection of claims 1 through 7, 9 through 15, 17 through 36 and 48 through 56. Claims 37 through 47 have been canceled.

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<sup>1</sup> Application for patent filed September 12, 1994.

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Claims 8 and 16, the only other claims in the application, stand withdrawn from consideration under 37 CFR § 1.142(b).

We REVERSE.

The subject matter on appeal is directed to a perfusion control system or heart-lung machine intended to provide the operator with improved access to and visibility of the various system components.

A copy of the appealed claims is appended to the main brief (Paper No. 24).

The prior art references of record relied upon by the examiner in rejecting the appealed claims are:

Rota	Des. 241,549	Sep.
21, 1976		
Fort	5,228,791	Jul. 20,
1993		

Additionally, the examiner relies on the admitted prior art (APA) shown in Figures 1 and 2 of the application.<sup>2,3</sup>

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<sup>2</sup>The examiner does not explicitly describe the content of the APA in the statement of the rejection, but we understand appellants' Figures 1 and 2 to be representative of the APA relied on by the examiner.

<sup>3</sup>We also call attention to the sales brochure for the Bard CardioPulmonary Support System (CPS™) submitted with the Information Disclosure Statement (IDS) filed on Sep. 12, 1994 (Paper No. 2). Appellants were advised by the examiner in the Office actions mailed July 24, 1995, Feb. 15, 1996 and Oct. 18, 1996 (Paper Nos. 9, 16 and 19, respectively) that the reference had not been considered because it was undated. However, on June 30,

(continued...)

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Claims 1 through 7, 9 through 15, 17 through 36 and 48 through 56 stand rejected under 35 U.S.C. § 103 as being unpatentable over the APA in view of Fort and Rota.

The full text of the examiner's rejection and the responses to the arguments presented by appellants appear in the Answer mailed June 23, 1997 (Paper No. 25), while the complete statement of appellants' arguments can be found in the main and reply Briefs filed April 4, 1997 and August 22, 1997 (Paper Nos. 24 and 27, respectively).

#### OPINION

In reaching our decision in this appeal, we have given careful consideration to the appellants' specification and claims, to the applied prior art references, and to the respective positions articulated by the appellants and the examiner. As a consequence of our review, we conclude that

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<sup>3</sup>(...continued)

1995, appellants filed a supplemental IDS (Paper No. 8½) admitting that the Bard CPS™ system was available more than one year prior to the application filing date. The Bard CPS™ system is described at page 8 of appellants' specification as comprising "an oxygenator centrally located between a pump and a heat exchanger." An illustration of the system in the sales brochure shows two flanking units (presumably, the pump and the heat exchanger) mounted atop a support console and a central cavity between the flanking units. To date, the record does not show that the examiner has fully considered this highly relevant prior art.

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the

§ 103 rejection cannot be sustained.

Independent claims 1 and 48 each call for a perfusion assembly for extracorporeal transfer of fluids comprising, inter alia, a console; at least two flanking units atop the console; and a central cavity adapted to receive an oxygenator between the at least two flanking units. The flanking units are further defined in claims 1 and 48 as comprising at least one pump

assembly and at least one of a pump assembly, a parameter monitoring assembly, a display monitor or a controller.

We are informed by appellants' specification that it was known in the art at the time appellants' invention was made to mount a perfusion system, including a vertical or horizontal row of discrete units, on a wheeled console [34] (page 4 and Figure 1). The discrete units included pump assemblies (pump housings and instrumentation panels) and a controller unit (for monitoring

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pressure and temperature probes, bubble and reservoir level sensors, regulating pump speed and transmitting monitored information to a display) (id.). The wheeled console commonly included one or more vertical poles [22, 26], a mounting crossbar [32], and brackets for hanging or attaching fluid reservoirs [58], instrumentation (e.g., a display [30]) and other devices. The oxygenator [20] was typically mounted on a mast or crossbar, e.g., by means of a swing arm [24] (page 13).

The Fort patent discusses prior art bifurcated keyboards in which the keyboard sections are connected by a hinge so that the sections may be elevated at an angle relative to each other (col. 2, lines 7-40). One of Fort's objects is to eliminate the

use of a hinge (col. 2, line 64 to col. 3, line 2). The reference teaches an ergonomic, bifurcated keyboard arrangement in which the keyboard sections are mounted on ball and socket joints [6a, 6b] so that each section is freely rotatable about three mutually perpendicular axes (col. 2,

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lines 56-63). In addition, the keyboard sections may be mounted on a base assembly [25] constructed in two parts [25a, 25b] which have

a telescoped section [26] allowing the distance between the joints and, thus, the keyboard sections mounted thereon, to be varied (col. 5, lines 49-62).

Rota is a design patent directed to a "modular medical or dental operatory unit." Figures 1 and 2 show rooms having curved walls and what may be curved support surfaces, consoles or appliances.<sup>4</sup>

Appellants argue (main Brief, page 11) that the APA does not teach or suggest a central cavity adapted to receive an oxygenator, wherein the central cavity is between two flanking units on a console and the flanking units are a pump assembly and at least one of a pump assembly, a parameter monitoring assembly,

a display monitor or a controller, that there is no suggestion

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<sup>4</sup> Since the Rota patent does not include a detailed description of the drawings, the exact nature of the objects illustrated in the rooms is unclear.

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or motivation for combining Fort or Rota with the APA, and that even if it were obvious to combine the references the resulting device would still not have the claimed flanking units and central cavity adapted to receive an oxygenator.

It is well established that before a conclusion of obviousness may be based on a combination of references, the examiner must show that some objective teaching or suggestion in the applied prior art, or knowledge generally available in the art, would have led those of ordinary skill to combine the teachings of the references to arrive at the claimed invention. Pro-Mold and Tool Co. v. Great Lakes Plastics Inc., 75 F.3d 1568, 1573, 37 USPQ2d 1626, 1629 (Fed. Cir. 1996); In re Fritch, 972 F.2d 1260, 1266, 23 USPQ2d 1780, 1784 (Fed. Cir. 1992); Ashland Oil, Inc. v. Delta Resins & Refractories Inc., 776 F.2d 281, 297 n. 24, 227 USPQ 657, 667 n. 24 (Fed. Cir. 1985). The APA, as illustrated in appellants' Figure 1, fails to teach or suggest a central cavity adapted to receive an oxygenator, wherein the central cavity is between two flanking units on a console and the

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flanking units are a pump assembly and at least one of a pump assembly, a parameter monitoring assembly, a display monitor or a controller. Like appellants, we fail to perceive any teaching or suggestion in the disclosures of Ford and Rota which would have motivated one of ordinary skill in the art to rearrange the discrete units of the APA in the claimed configuration. In fact, both Ford and Rota are lacking in any disclosure of separating discrete units into at least two flanking units with a central cavity therebetween adapted to receive or which is capable of receiving an oxygenator.

The examiner's other assertion (Answer, page 4) that the claimed arrangement of known perfusion system components is a matter of design choice is not persuasive.

In appellants' specification, at page 12, it is indicated that the centralized location of the oxygenator can reduce extracorporeal volume, improve the perfusionist's reach of the system components and the perfusionist's view of the operating

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table, operating room monitors and/or surgical team.

Accordingly, the claimed perfusion assembly solves a number of known problems in the art. Compare In re Kuhle, 526 F.2d 553,

555, 188 USPQ 7, 9 (CCPA 1975) wherein the court indicated that

the rationale of "obvious matter of design choice" applies when a modification is made which "solves no stated problem."

Therefore, we do not agree that the examiner has a valid basis for asserting that it would have been an obvious matter of mechanical "design choice" to provide a central cavity adapted to receive an oxygenator between at least two flanking units.

From our perspective, the examiner has impermissibly relied upon the appellants' own teachings in arriving at a conclusion of

obviousness. This being the case, we will not sustain the rejection of independent claims 1 and 48 under 35 U.S.C. § 103 based on the combined teachings of the APA, Fort and Rota.

Since claims 2 through 7, 9 through 15, 17 through 36 and 49 through 56 are dependent on either claim 1 or claim 48 and

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include all the limitations of their respective independent claim, it follows that we will also not sustain the standing rejection of claims 2 through 7, 9 through 15, 17 through 36 and 49 through 56 under 35 U.S.C. § 103.

In summary, the examiner's rejection of claims 1 through 7, 9 through 15, 17 through 36 and 48 through 56 under 35 U.S.C. § 103 is reversed.

REVERSED

IRWIN CHARLES COHEN	)	
Administrative Patent Judge	)	
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	)	
	)	BOARD OF PATENT
NEAL E. ABRAMS	)	APPEALS AND
Administrative Patent Judge	)	INTERFERENCES
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JOHN F. GONZALES )  
Administrative Patent Judge )

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