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UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE PATENT TRIAL AND APPEAL BOARD

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*Ex parte* JAE-HWANG KIM

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Appeal 2011-006578  
Application 11/950,187  
Technology Center 3700

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Before TONI R. SCHEINER, FRANCISCO C. PRATS, and  
SHERIDAN K. SNEDDEN, *Administrative Patent Judges*.

SNEDDEN, *Administrative Patent Judge*.

DECISION ON APPEAL

This is an appeal under 35 U.S.C. § 134 involving claims to an apparatus for diverting feces. The Examiner has rejected the claims as obvious. We have jurisdiction under 35 U.S.C. § 6(b). We reverse.

### STATEMENT OF THE CASE

Claims 1-4 and 7-9 are on appeal. Claim 1, the only independent claim on appeal, is representative and reads as follows (emphasis added):

1. An apparatus for diverting feces, comprising:

a tubular body part;

an internal balloon formed at the inside of the tubular body part;

at least one external balloon formed at the outside of the tubular body part;

an enema liquid injection hole formed through a forefront of the tubular body part, so as to allow an enema liquid to be injected into an intestinal tract of a patient through a control tube;

a device controller connected to the control tube controlling the injection of the enema liquid, supplied from an enema liquid supplying unit, into the intestinal tract through the control tube, the device controller having a memory;

an internal balloon filling unit causing a filler to fill the internal balloon or to be discharged from the internal balloon;

an external balloon filling unit causing the filler to fill the at least one external balloon or to be discharged from the at least one external balloon;

a fecal diverting program in the memory of the device controller for controlling the internal balloon filling unit and the external balloon filling unit; and

*an intestinal pressure sensing unit connected to the device controller, the device controller contracting the internal balloon when the intestinal pressure sensing unit senses a pressure greater than a critical pressure to relieve the intestinal pressure without deflating the at least one external balloon.*

The claims stand rejected as follows:

- I. Claims 1-3 and 7-9 under 35 U.S.C. § 103(a) as being unpatentable over the combination of Kim,<sup>1</sup> Griffiths,<sup>2</sup> and Corday.<sup>3</sup>
- II. Claim 4 under 35 U.S.C. § 103(a) as being unpatentable over Kim, Griffiths, Corday, Xu<sup>4</sup> and Pham.<sup>5</sup>

The same issue is dispositive for each of the rejections.

*Issue*

The Examiner finds that the combination of Kim and Griffiths does not “teach that the [balloon-filling] action is controlled by an intestinal pressure sensing unit cooperating with the device controller” (Ans. 6). However, the Examiner finds that it “would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Kim to include a controlling unit and pressure sensing unit, as taught by Corday et al., for the purpose of providing safe conditions so that no damage occurs internally” (*id.* at 7, citing Corday at col 7, ll. 57-62).

Appellant contends that “the Examiner fails to explain how the program in the memory of Griffiths et al.’s pump controller 30, inflating and deflating a balloon to treat an occlusion, qualifies as the claimed fecal diverting program” (App. Br. 4). Appellant contends that “[t]here is no explanation of how the pressure sensors of Corday et al. would be integrated with the controller of Griffiths et al. [s]ince the controller of Griffiths et al. does not use pressure measurements as a factor in taking control action”

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<sup>1</sup> Kim, US 2005/0033226 A1, published Feb. 10, 2005.

<sup>2</sup> Griffiths et al., US 2007/0197963 A1, published Aug. 23, 2007.

<sup>3</sup> Corday et al., US 4,689,041, issued Aug. 25, 1987.

<sup>4</sup> Xu et al., US 2003/0195481 A1, published Oct. 16, 2003.

<sup>5</sup> Pham et al., US 2003/0208156 A1, published Nov. 6, 2003.

(*id.*). Thus, the “prior art, taken alone or in combination, does not disclose ... an intestinal pressure sensing unit connected to the device controller” (*id.* at 5).

The issue presented is:

Does the evidence of record support the Examiner’s findings that the cited prior art renders claim 1 obvious?

*Findings of Fact*

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

FF1. Griffiths discloses a medical injection and inflation system which “generally comprises a fluid delivery system comprising at least one pressurizing device, a fluid path adapted to connect the at least one pressurizing device to a patient via a catheter comprising a balloon and inserted in the patient, and a control unit” (Griffiths 2, ¶ [0019]).

FF2. Griffiths discloses that the control unit may be programmed to set a limit on the inflation rate or pressure increase in the balloon or other components in the fluid path in order to prevent damage to the blood vessel (*see, e.g., id.* at ¶¶ [0056], [0062], and [0072]).

FF3. Corday discloses “a method and system for the controlled directional venous retroinfusion of a variety of fluids, pharmacologic agents or diagnostic contrast solutions, either alone or in association with arterial blood” (Corday col. 2, ll. 25-29).

FF4. “The balloon is then deflated after a particular treatment period, or else retroinfusion is reduced or terminated whenever the fluid pressure in

the regional vein exceeds a predetermined maximal pressure which could lead to tissue damage” (*id.* at Abstract).

FF5. The Corday system includes a pressure sensing device, where  
The pressure sensing device **30** is in operative communication with a control means **36** which is activated by pressure signals indicating excessive pressures in the coronary sinus **25** and which triggers a reduction or termination of the operation of pump **32** to thereby regulate the delivery of retroinfusate to and pressure within the coronary sinus **25**

(*id.* at col. 6, ll. 34-41).

#### *Principles of Law*

“[T]he examiner bears the initial burden, on review of the prior art or on any other ground, of presenting a *prima facie* case of unpatentability. If that burden is met, the burden of coming forward with evidence or argument shifts to the applicant.” *In re Oetiker*, 977 F.2d 1443, 1445 (Fed. Cir. 1992).

When determining whether a claim is obvious, an examiner must make “a searching comparison of the claimed invention — including all its limitations — with the teachings of the prior art.” *In re Ochiai*, 71 F.3d 1565, 1572 (Fed. Cir. 1995). As the Supreme Court pointed out in *KSR Int’l Co. v. Teleflex Inc.*, 550 U.S. 398, 418 (2007), “a patent composed of several elements is not proved obvious merely by demonstrating that each of its elements was, independently, known in the prior art.” Rather, the Court stated:

[I]t can be important to identify a reason that would have prompted a person of ordinary skill in the relevant field to combine the elements in the way the claimed new invention

does ... because inventions in most, if not all, instances rely upon building blocks long since uncovered, and claimed discoveries almost of necessity will be combinations of what, in some sense, is already known.

*Id.* at 418-419 (emphasis added); *see also id.* at 418 (requiring a determination of “whether there was an apparent reason to combine the known elements *in the fashion claimed* by the patent at issue”) (emphasis added). Similarly, as our reviewing court has stated, “obviousness requires a suggestion of all limitations in a claim.” *CFMT, Inc. v. Yieldup Intern. Corp.*, 349 F.3d 1333, 1342 (Fed. Cir. 2003).

#### *Analysis*

We agree with Appellant that the cited references do not support a prima facie case of obviousness. Like Appellant, we are unable to find where in the cited references an intestinal pressure sensing unit is taught. We further agree that the Examiner has not adequately explained how references related to vascular pressure or vascular damage (*see, e.g.*, FF1 – FF5) would have suggested using an intestinal pressure sensing unit for diverting feces in a device such as that taught by Kim (*see App. Br. 4*).

Since all claim limitations are not taught or suggested by the applied prior art, the Examiner has failed to establish a prima facie case for the obviousness of claim 1.

#### *Conclusion of Law*

We conclude that the preponderance of the evidence of record does not support the Examiner’s conclusion that the combination of Kim, Griffiths, and Corday discloses an apparatus having all limitations of independent claim 1 and dependent claims thereto (claims 2-9). We thus

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reverse the rejections under 35 U.S.C. § 103(a) that rely on the teachings of Kim, Griffiths, and Corday.

**SUMMARY**

We reverse all rejections on appeal.

**REVERSED**

cdc