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| WELSH FLAXMAN & GITLER LLC<br>2000 DUKE STREET, SUITE 100<br>ALEXANDRIA, VA 22314 |             |                      | MATTHEWS, CHRISTINE HOPKINS |                  |
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BEFORE THE PATENT TRIAL AND APPEAL BOARD

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*Ex parte* RANDAL T. BYRUM, SEAN P. CONLON,  
ALEC J. GINGGEN, BRET W. SMITH,  
DEAN L. GARNER, and DANIEL F. DLUGOS JR.

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Appeal 2015-001376  
Application 12/557,836  
Technology Center 3700

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Before DONALD E. ADAMS, JEFFREY N. FREDMAN, and  
TIMOTHY G. MAJORS, *Administrative Patent Judges*.

*PER CURIAM*

DECISION ON APPEAL<sup>1</sup>

This Appeal under 35 U.S.C. § 134 involves claims 1, 10, and 11 (App. Br. 3). Examiner entered rejections under 35 U.S.C. §102(b) and 35 U.S.C. §103(a). We have jurisdiction under 35 U.S.C. § 6(b).

We affirm-in-part.

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<sup>1</sup> Appellants identify the Real Party in Interest as Ethicon Endo-Surgery, Inc. (App. Br. 1).

## STATEMENT OF THE CASE

Appellants' "invention relates to laparoscopic implants designed to be implanted in the body of a patient around a biological organ having a pouch or duct to regulate functioning of the organ or duct" (Spec. 1:6–8). More particularly, Appellants' invention "is directed to an implantable telemetrically-powered and controlled ring having a detachable antenna suitable for use as a gastric band to treat obesity or as an artificial sphincter" (*id.* at 1:8–10). Independent claim 1 is representative and reproduced in Appellants' Appeal Brief.

1. Apparatus for regulating the functioning of a patient's organ or duct, comprising:

an elongated member having first end and second ends;

a fastener disposed on the first end of the elongated member, the fastener configured to engage the second end of the elongated member so that the elongated member forms a ring around the organ or duct;

a tension element disposed for movement within the elongated member;

a drive element associated with and engaging the tension element for causing the tension element to control the tension applied by the elongated member against a patient's body organ or duct; and

an antenna/controller pod releasably coupled to the elongated member for control of the drive element, wherein an antenna cable connects the antenna/controller pod to the elongated member, the antenna cable including a proximal end which is selectively secured to a distal end of the antenna/controller pod by threads or a bayonet style connection

in a manner maintaining electrical connections between the antenna/controller pod and the antenna cable.

(Claims App'x, 19.)

Claim 11 stands rejected under 35 U.S.C. § 102(b) as being anticipated by Bachmann.<sup>2</sup>

Claims 1 and 10 stand rejected under 35 U.S.C. § 103(a) as unpatentable over the combination of Paganon<sup>3</sup> and Pool.<sup>4</sup>

*Anticipation:*

#### ISSUE

Does the preponderance of evidence relied upon by Examiner support Examiner's finding that Bachmann teaches Appellants' claimed invention?

#### FACTUAL FINDINGS (FF)

FF 1. Bachmann teaches that “[f]or treatment of urinary incontinence, the ring may be further modified to minimize the volume of the ring surrounding the urethra by moving the actuator motor to a location elsewhere in the lower abdomen or pelvis, and coupling the actuator to the motor via a transmission cable” (Bachman ¶ 141; *see also* Ans. 4–5).

#### ANALYSIS

Appellants' independent claim 11 is for a method and requires, *inter alia*, (a) “inserting an antenna/controller pod into the patient through a first body opening remote from the patient's organ or duct to be regulated;”

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<sup>2</sup> Bachmann et al., US 2005/0143765 A1, published June 30, 2005.

<sup>3</sup> Paganon, US 2007/0213836 A1, published Sept. 13, 2007.

<sup>4</sup> Pool et al., US 2009/0062825 A1, published Mar. 5, 2009.

(b) “inserting through a second body opening spaced from the first body opening an elongated restrictive device”, and (c) “connecting in situ the antenna/controller pod via a cable to the drive element of the elongated restrictive device in order to control movement of the tension element” (*see* Claims App’x, 20–21).

Examiner finds that

Bachmann discloses that a controller (actuator) is coupled to the drive element (motor) via a transmission cable. This takes place *in situ* as Bachmann teaches moving the motor to a location elsewhere in the lower abdomen or pelvis and then coupling the controller (actuator) to the drive element (motor) via a transmission cable [0141]. Since the controller (actuator) is already located in the lower abdomen or pelvis, coupling the controller (actuator) to the motor via a transmission cable must occur *in situ*.

(Ans. 4–5.) We are not persuaded.

Instead, we agree with Appellants that:

the fact the actuator is connected to a motor via a transmission cable and the motor may be positioned at locations within the abdomen or pelvis, does not lead to the conclusion of an *in situ* connection, either explicitly or inherently as required by the pending claim at issue. Bachmann’s statement merely indicates a connection, and does not disclose, either explicitly or inherently, the step of “connecting *in situ*”[] as required by claim 11.

(Br. 9–10; *see also* FF 1; Reply Br. 2–3.) “Inherency . . . may not be established by probabilities or possibilities. The mere fact that a certain thing may result from a given set of circumstances is not sufficient.”

*MEHL/Biophile Int'l. Corp. v. Milgraum*, 192 F.3d 1362, 1365 (Fed. Cir. 1999).

*Obviousness:*

### ISSUE

Does the preponderance of evidence relied upon by Examiner support a conclusion of obviousness?

### FACTUAL FINDINGS (FF)

We adopt Examiner's findings concerning the scope and content of the prior art (Ans. 3–4), and provide the following findings for emphasis.

FF 2. Appellants' Figure 9 is reproduced below:

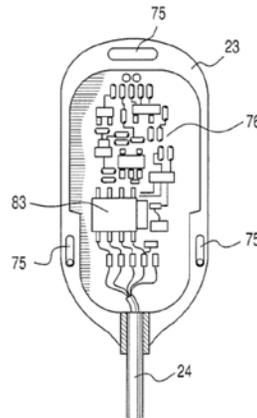


FIG. 9

Figure 9 shows “the antenna/controller pod 23 encloses a printed circuit board 76 that carries the antenna 83 and microcontroller circuitry of the gastric band 21” (Spec. 17:4–6).

FF 3. Paganon's Figure 2 is reproduced below:

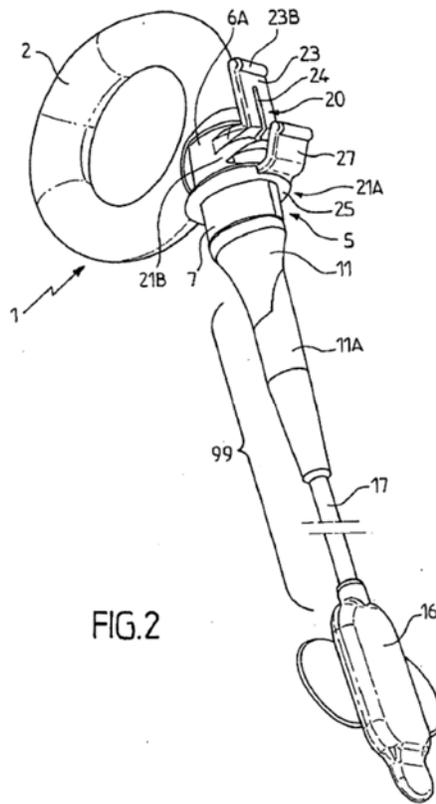


Figure 2 shows

An implantable surgical ring (1, 10) for surrounding one or more organs having a pouch or a duct, in order to modify the section of the passage in the organ(s), the ring (1, 10) being in the form of a flexible strap (2, 20) extending between first and second ends (3, 4, 40, 400), the flexible strap (2, 20) being provided towards its first and second ends (3, 4, 40, 400) with respective male and female closure elements (5, 50; 6, 60, 600) arranged to cooperate in such a manner that the flexible strap (2, 20) forms a closed loop, the female closure element (6, 60, 600) permanently forming a closed collar.

(Paganon Abstract; *see also* Ans. 3-4.)

FF 4. Paganon's Figure 9 is reproduced below:

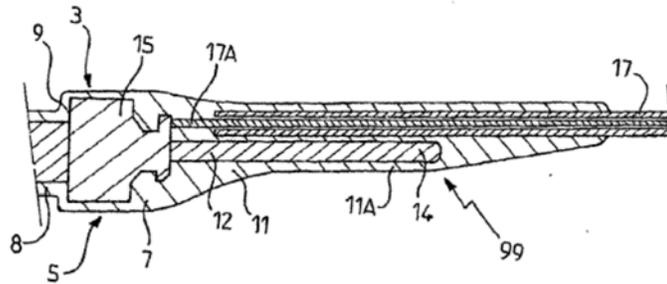


FIG.9

Figure 9 shows that “[t]he electric motor **15, 150**, which does not have any internal power supply, is functionally connected via an electrical connection **17A** to the circuit of the receiver antenna **16**” (Paganon ¶ 73; *see also* Ans. 3–4).

FF 5. Paganon suggests that “the actuator-forming electric motor **15, 150** is advantageously connected to a subcutaneous receiver circuit provided with a receiver antenna **16** . . . for receiving a radiofrequency (RF) control and power signal, the assembly being designed to be implanted in the body of the patient” (Paganon ¶ 72; *see also* Ans. 3–4).

FF 6. Pool suggests “[a] system [that] includes an adjustable implant configured for implantation internally within a subject, . . . a drive transmission configured to alter a dimension of the adjustable implant” (Pool Abstract; *see also* Ans. 4).

FF 7. Pool's Figure 68 is reproduced below:

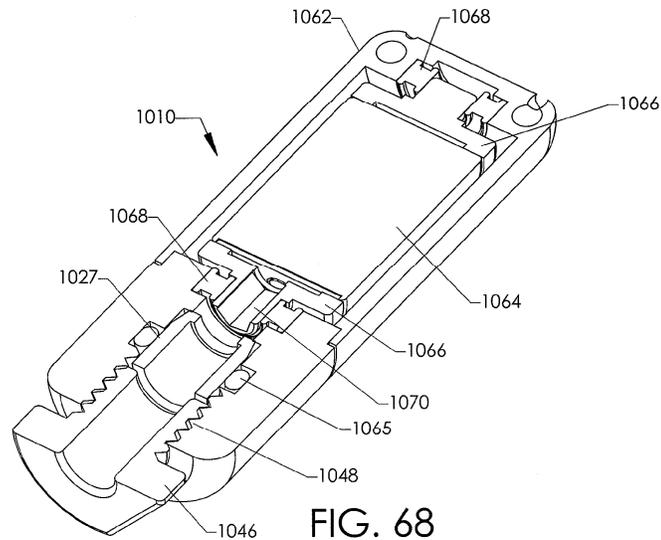


Figure 68 shows that

the proximal end of the drive cable sheath **1026** . . . may have a quick disconnect feature so that the drive cable **1050** and/or implantable interface **1010** may be rapidly changed. In one aspect, the proximal end of the drive cable sheath **1026** includes a flanged end portion **1027** that is dimensioned to abut a sheath retaining nut **1046** that engages with mating threads **1048** located at one end of the housing **1062**.

(Pool ¶ 231; *see also* Ans. 4.)

#### ANALYSIS

Appellants' independent claim 1 requires, *inter alia*, "an antenna/controller pod releasably coupled to the elongated member for control" (*see* Appellants' claim 1).

Examiner finds that "Paganon discloses an apparatus for regulating the functioning of a patient's organ or duct, comprising: an elongated

member **2** having first end **3** and second ends **4 . . .**” (Ans. 3). Examiner acknowledges that “Paganon fails to disclose explicitly the connection between the antenna/controller pod **16** and the antenna cable and the pod **16** and the retaining base” (*id.* at 3–4). Examiner turns to Pool and finds that Pool suggests “that the proximal end of the drive cable sheath may have a quick disconnect feature so that the drive cable **1050** and the implantable interface (‘controller pod’) **1010** may be rapidly changed” (*id.* at 4). Examiner concludes that it would have been obvious to “have incorporated a threaded connection as taught by Pool, in a releasable coupling between a controller and cable or controller and retaining base of a gastric banding system as suggested by Paganon, as such a coupling allows a quick disconnect feature to the system ([0231] of Pool)” (*id.*).

We adopt Examiner’s findings concerning the scope and content of the prior art (Ans. 3–6; FF 3–7), and agree that the claims would have been obvious over Paganon and Pool. We address Appellants’ arguments below.

As an initial matter, Examiner asserts that “claim 1 does not require that the ‘antenna/controller pod’ receive wireless signals. Moreover, the terms ‘antenna’ and ‘cable’ are presented in the alternative with the inclusion of the slash in between the terms. Thus presently, the claim is interpreted as a ‘controller pod’” (Ans. 5).

We are not persuaded and agree with Appellants that

[w]hile use of a “/” may indicate “or,” this is not the sole meaning as it may be used to identify a clear connection between words. The use of the “/” in the present application identifies a clear

connection between the words “antenna” and “controller” as it indicates the dual functions of the pod.

(App. Br. 16; FF 2.) We are, however, not persuaded by Appellants’ contention that

while element 1010 of Pool is an implantable interface, the implantable interface is not an antenna/controller pod as claimed in accordance with the present invention. Rather, implantable interface 1010 includes a magnetic element 1064 used to rotate the drive cable so as to cause linear movement of an actuator. A magnetic element used to rotate a drive cable so as to cause linear movement of an actuator is very different from the claimed antenna/controller pod receiving wireless signals for control thereof. The considerations associated with the provision of a quick release mechanism in conjunction with the mechanical based implantable interface 1010 of Pool are very different from those associated with an electrical based antenna/controller pod as claimed in accordance with the present invention or the receiver antenna 16 of Paganon.

(App. Br. 14–15; *see also* Reply Br. 3.)

Paganon suggests “[a]n implantable surgical ring (**1, 10**) for surrounding one or more organs having a pouch or a duct, in order to modify the section of the passage in the organ(s)” (FF 3). Paganon suggests that “[t]he electric motor **15, 150**, which does not have any internal power supply, is functionally connected via an electrical connection **17A** to the circuit of the *receiver antenna 16*” (FF 4 (emphasis added)), and that “the actuator-forming electric motor **15, 150** is advantageously connected to a subcutaneous receiver circuit provided with a *receiver antenna 16 . . . for receiving a radiofrequency (RF) control and power signal*, the assembly being designed to be implanted in the body of the patient” (FF 5 (emphasis

added)). Therefore, Paganon suggests an “antenna/controller pod” as claimed.

Pool suggests “[a] system [that] includes an adjustable implant configured for implantation internally within a subject, . . . a drive transmission configured to alter a dimension of the adjustable implant” (FF 6). Pool evidences that “the proximal end of the drive cable sheath **1026** . . . may have a *quick disconnect feature* so that the drive cable **1050** and/or implantable interface **1010** *may be rapidly changed*” (FF 7 (emphasis added)).

We therefore agree with the Examiner that it would have been obvious to provide the releasable coupling as taught by Pool to the implantable device of Paganon (*see* Ans. 4). The combined teachings of Pool and Paganon regarding a quick disconnect feature, would yield predictable results of an implantable device having a controller/pod that can be rapidly changed from the implantable device.

“Non-obviousness cannot be established by attacking references individually where the rejection is based upon the teachings of a combination of references []. [The reference] must be read, not in isolation, but for what it fairly teaches in combination with the prior art as a whole.” *In re Merck & Co.*, 800 F.2d 1091, 1097 (Fed. Cir. 1986). *See also In re Geisler*, 116 F.3d 1465, 1470 (Fed. Cir. 1997) (“[A]ttorney argument [is] not the kind of factual evidence that is required to rebut a prima facie case of obviousness”).

In regard to claim 10, Appellants contend that “this claim relate[s] to a threaded attachment between the antenna cable and the antenna/controller

pod. . . . Appellants find no disclosure, either explicitly or implicitly, regarding a threaded attachment as claimed” (App. Br. 17).

We are not persuaded. Pool suggests that “the proximal end of the drive cable sheath **1026** includes a flanged end portion **1027** that is dimensioned to abut a sheath retaining nut **1046** that engages with *mating threads 1048* located at one end of the housing **1062**” (FF 7 (emphasis added)).

#### CONCLUSION OF LAW

The rejection of claim 11 under 35 U.S.C. § 102(b) as being anticipated by Bachmann is reversed.

The rejection of claims 1 and 10 under 35 U.S.C. § 103(a) as unpatentable over Paganon and Pool is affirmed.

#### TIME PERIOD FOR RESPONSE

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