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BEFORE THE PATENT TRIAL AND APPEAL BOARD

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*Ex parte* MICHAEL A. ZEMLOK and ADAM J. ROSS<sup>1</sup>

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Appeal 2017-010590  
Application 13/788,293  
Technology Center 3700

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Before JENNIFER D. BAHR, MICHAEL L. HOELTER, and  
SEAN P. O'HANLON, *Administrative Patent Judges*.

O'HANLON, *Administrative Patent Judge*.

DECISION ON APPEAL

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<sup>1</sup> Appellant is the Applicant, Covidien LP, which, according to the Appeal Brief, is the real party in interest. Appeal Br. 1.

### STATEMENT OF THE CASE

Appellant appeals under 35 U.S.C. § 134(a) from the Examiner's decision, as set forth in the Final Office Action dated October 5, 2016 ("Final Act."), rejecting claims 1–10 as being unpatentable under 35 U.S.C. § 103(a) over Hooven (US 5,383,880, issued Jan. 24, 1995) and Odom (US 2008/0039831 A1, published Feb. 14, 2008). We have jurisdiction over this appeal under 35 U.S.C. § 6(b). We AFFIRM.

### SUMMARY OF THE INVENTION

Appellant's claimed invention is directed to "a surgical stapler for implanting mechanical surgical fasteners into the tissue of a patient." Spec. ¶ 2. Claims 1 and 8 are independent. Claim 1, reproduced below from page 8 (Claims Appendix) of the Appeal Brief, is illustrative of the claimed subject matter:

1. A powered surgical stapler comprising:
  - a housing;
  - an endoscopic portion extending distally from the housing and defining a first longitudinal axis;
  - a drive motor disposed at least partially within a housing;
  - a firing rod disposed in mechanical cooperation with the drive motor;
  - an end effector disposed adjacent a distal portion of the endoscopic portion, the end effector being in mechanical cooperation with the firing rod to fire a surgical fastener;
  - a current sensor measuring a current draw of the motor;and
  - a controller comparing the measured current draw of the motor to current draw data indicative of successful deployment of the surgical fastener to determine whether the surgical fastener is successfully deployed.

## ANALYSIS

Appellant presents arguments for independent claims 1 and 8 collectively. Appeal Br. 3–6. We select claim 1 as representative. *See* 37 C.F.R. § 41.37(c)(1)(iv).

The Examiner finds that Hooven discloses a powered surgical stapler substantially as recited in claim 1, including, *inter alia*, a controller configured to determine whether a surgical fastener is successfully deployed based on the current draw on the motor. Final Act. 2–3, 5. The Examiner relies on Odom to teach comparing the measured current data with stored data indicative of a successful fastener deployment, reasoning that it would have been obvious to one of ordinary skill in the art “to modify the controller of Hooven with the current measurement and application of Od[o]m to determine cartridge type and or status in an endoscopic cutting and stapling device to determine whether the instruments are appropriate for their intended use and to have greater control of the surgical instrument.” *Id.* at 3; *see also id.* at 6–7.

Appellant traverses the rejection, arguing that “Hooven simply discloses detecting the placement of staples or the presence of staples in the cartridge. Hooven fails to teach or suggest detecting the deployment of staples. Further, Hooven fails to relate ‘measured current draw of the motor’ with the successful deployment of the staples. . . .” Appeal Br. 4–5; *see also* Reply Br. 2–3.

As correctly noted by the Examiner (*see* Ans. 9), Hooven discloses monitoring the motor current to measure the force required to close the instrument. Hooven, 5:65–67. Hooven further discloses that the controller monitors motor parameters, including current input, “for . . . use in a suitable

manner.” *Id.* at 5:1–7. Hooven’s sensors monitor the operation of the instrument, such as whether it was activated correctly, and the controller provides this information to the surgeon (user). *Id.* at 2:44–48; *see also id.* at 8:4–7. Figure 20B discloses that the controller determines if the “device [has] fired completely and correctly.” *See also id.* at 9:31–33. Thus, we agree with the Examiner that Hooven discloses determining whether a fastener was successfully deployed based on monitored motor parameters, including current input (i.e., current draw).

Appellant also argues that “Odom monitors current signals to calculate one or more properties of electrical radio frequency energy supplied to the tissue through the instrument, rather than current supplied to a motor.” Appeal Br. 6. Appellant acknowledges that “Odom discloses storing voltage, current, and impedance data,” but argues that “Odom does not suggest that ‘this data would include the motor power,’ nor does it suggest using any data as ‘part of the calculations to determine whether the surgical stapler successfully deployed staples.’” *Id.*

Appellant’s argument attacks Odom individually, rather than as combined with Hooven in the rejection. The Examiner relies on Hooven, not Odom, to disclose monitoring motor current draw to determine whether the device successfully deployed the staples. Final Act. 2–3, 5. The Examiner relies on Odom to teach comparing measured data with stored data. *Id.* at 3; *see also* Ans. 10 (“Odom is brought in to specifically teach a controller comparing measured current draw and forming calculations for instrument function based on the compared data.”). “Non-obviousness cannot be established by attacking references individually where the rejection is based upon the teachings of a combination of references.” *In re*

*Merck & Co.*, 800 F.2d 1091, 1097 (Fed. Cir. 1986) (citing *In re Keller*, 642 F.2d 413, 425 (CCPA 1981).” Appellant’s arguments fail to address the rejection as articulated by the Examiner, and, therefore, fail to apprise us of error.

Additionally, we note that Odom discloses determining an initial tissue impedance value by monitoring voltage and current. Odom ¶ 32, Fig. 3. The initial impedance values can be compared to data in a look up table to determine treatment parameters, such as duration and amount of energy to be applied. *Id.* ¶ 35. Thus, Odom supports the Examiner’s findings.

Accordingly, for the foregoing reasons, we sustain the Examiner’s rejection of independent claims 1 and 8 as being unpatentable over Hooven and Odom. Appellant does not advance separate arguments for the patentability of dependent claims 2–7, 9, and 10; instead, Appellant expressly relies on the arguments made for claim 1 and discussed above. *See* Appeal Br. 6. Thus, we also sustain the rejection of the dependent claims.

#### DECISION

The Examiner’s decision to reject claims 1–10 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)(1)(iv).

AFFIRMED