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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* GEIR ANDRE MOTZFELDT DRANGE

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Appeal 2018-002105  
Application 14/561,332<sup>1</sup>  
Technology Center 2800

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Before KAREN M. HASTINGS, JAMES C. HOUSEL, and  
JEFFREY R. SNAY, *Administrative Patent Judges*.

HASTINGS, *Administrative Patent Judge*.

DECISION ON APPEAL

Appellant seeks our review under 35 U.S.C. § 134(a) of the Examiner’s decision rejecting claims 1–24 under 35 U.S.C. § 102(a)(1) as being anticipated by Súdow et al. (US 2013/0127471 A1, published May 23, 2013) (“Súdow”).

We have jurisdiction over the appeal under 35 U.S.C. § 6(b).<sup>2</sup>

We AFFIRM.

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<sup>1</sup> Appellant is the Applicant, PGS Geophysical AS, which, according to the Appeal Brief, is the real party in interest (Appeal Br. 3).

<sup>2</sup> We additionally refer to the Specification filed Dec. 5, 2014 (“Spec.”); the Final Office Action (“Final Act.”) dated Feb. 24, 2017, the Examiner’s Answer dated Nov. 3, 2017 (“Ans.”), and the Reply Brief filed Dec. 19, 2017 (“Reply Br.”).

Independent claim 1 below is illustrative of the subject matter on appeal (emphases added):

1. An apparatus comprising:
  - a first streamer section comprising:*
    - a first outer surface that defines an interior volume;
    - a first connector coupled to a first end of the first outer surface, and at least a portion of the first connector is electrically conductive;*
    - a first digitizer node that defines a first input port and second input port, the first digitizer node disposed within the interior volume of the first outer surface, the first input port is electrically coupled to the first connector such that the portion of the first connector that is electrically-conductive is a first electrode;
    - the first digitizer node configured to measure a potential difference between the first electrode at a first potential and a second potential coupled to the second input port.

## ANALYSIS

Appellant presents arguments for claim 1, claim 4, and claim 14 (Appeal Br. 7–18). Claims 2, 3, and 7–13 depend from claim 1, claims 5 and 6 depend from claim 4, and claims 15–24 depend from claim 14. Therefore, we address claims 1–3 and 7–13 as a first group, claims 4–6 as a second group, and claims 14–24 as a third group.

### Claims 1–3 and 7–13

Appellant’s principle argument on appeal is that the Examiner’s interpretation of claim 1 is overbroad and unreasonable (Appeal Br. 7–14; Reply Br. 1–11). Specifically, Appellant asserts there are different definitions of “connector” than the one cited by the Examiner (e.g., “any of various devices for connecting one object to another”), Südow’s cable segments 10A are not devices for connecting one object to another, the cable

segments 10A include termination plates 34 that connect to Südow's signal processing modules 50 and thus serve as connectors, and the Examiner's interpretation of "connector" is inconsistent with Appellant's disclosure, Südow's teachings regarding cable segments 10A and modules 50 in between, and how one of ordinary skill in the art would understand the claim recitations (Appeal Br. 8–11, 13–14; Reply Br. 10–11). Appellant contends the Examiner has transmogrified Südow's modules 50 and cable segments 10A into streamer sections and connectors so claim 1 reads upon these structures (Appeal Br. 12–13; Reply Br. 10).

Appellant's arguments are unpersuasive. As explained by the Examiner at page 3 of the Examiner's Answer, claim 1 includes few recitations regarding the "connector," such as its structure. Specifically, claim 1 recites, among other things, a first streamer section comprises a first outer surface defining an interior volume, a first connector coupled to a first end of the outer surface, wherein at least a portion of the first connector is electrically conductive, and a first digitizer node. Thus, claim 1 requires the streamer section to have an outer surface that defines an interior volume and be coupled to a first connector at a first end of the first outer surface. Claim 1 does not specify how the streamer section and connector are coupled, such as a specific connector structure or a type of connection (Ans. 3). Claim 1 requires that the connector be coupled to a first end of the streamer section's outer surface and that at least a portion of the connector is electrically conductive (and thus can function as a first electrode, per the recitations regarding the first digitizer node).

We therefore turn to Appellant's disclosure to construe claim 1 under its broadest reasonable interpretation. "[T]he PTO must give claims their

broadest reasonable construction consistent with the specification. . . .

Therefore, we look to the specification to see if it provides a definition for claim terms, but otherwise apply a broad interpretation” (*In re ICON Health & Fitness, Inc.*, 496 F.3d 1374, 1379 (Fed. Cir. 2007)). “[A]s applicants may amend claims to narrow their scope, a broad construction during prosecution creates no unfairness to the applicant or patentee” (*id.*).

As noted above, Appellant argues the Examiner’s interpretation that a connector is a “component which links two or more components together” (Ans. 3) is unreasonable and inconsistent with their disclosure. However, Appellant’s citations to their Specification and drawings (Appeal Br. 10–12; Reply Br. 3–7, 10–11), which disclose streamer sections connected end to end via coupling connectors, do not prove otherwise. As shown in Appellant’s Figures 1 and 2, a connector 119 may be located between and couple ends of streamer sections 117.

Nor do we discern an expression of intent to limit a “streamer section,” “connector,” or manner of coupling to a specific meaning (*In re Am. Acad. of Sci. Tech. Ctr.*, 367 F.3d 1359, 1365 (Fed. Cir. 2004) (an applicant “may demonstrate an intent to deviate from the ordinary and accustomed meaning of a claim term by including in the specification expressions of manifest exclusion or restriction, representing a clear disavowal of claim scope.”)). Indeed, paragraph 15 of the Specification states “the term ‘couple’ or ‘couples’ is intended to mean either an indirect or direct connection” and that “[t]his document does not intend to distinguish between components that differ in name but not function.”

Therefore, in light of the breadth of claim 1 and how streamer sections and connectors are described in Appellant’s disclosure, we agree with the

Examiner that the broadest reasonable interpretation of claim 1 encompasses connectors that function to link two or more components together.

We therefore turn to the art rejection to analyze whether Súdow anticipates claim 1 under this broadest reasonable interpretation. Súdow discloses an electromagnetic survey system including a sensor cable 10 assembled from a plurality of cable segments 10A, signal processing modules 50, and an end plug 50A (Súdow ¶ 15, Fig. 1). Súdow describes sensor cable segments 10A as being “coupled to opposite ends of one of the signal processing modules 50” (*id.* ¶ 24). Therefore, Súdow’s modules 50 function as connectors that link two or more components together (i.e., sensor cable segments 10A). We further note that the modules 50 meet the definition of “connector” advanced by Appellant because the modules 50 connect ends of cable segments 10A to one another (Appeal Br. 8). Therefore, stated another way, although Súdow uses a different name for the signal processing module 50 than “connector” and a different name than “streamer section” for the cable segments 10A, these components have the structure recited in claim 1 and respectively perform functions encompassed by the “connector” and “streamer section” of claim 1 (*see* Spec. ¶ 15 (“[t]his document does not intend to distinguish between components that differ in name but not function”)).

Furthermore, the Examiner finds the modules 50 have housings 52 defining an interior volume (i.e., an outer surface that defines an interior volume for the claimed streamer section) and the cable segments 10A include electrodes E that are conductive (Final Act. 7). Appellant does not dispute these findings. At page 10 of the Reply Brief, Appellant argues no portion of Súdow’s module 50 is used as an electrode because Súdow’s

electrodes are located in the cable segments 10A. However, Appellant has not shown good cause why this argument could not have been presented in the Appeal Brief. Therefore, we will not consider the separate argument for claim 1 newly raised in the Reply Brief (37 C.F.R. § 41.41(b)(2)).

Nonetheless, the Examiner finds Südown discloses a low noise amplifier (LNA) 56 that functions as the first digitizer node of claim 1 to determine a potential difference between electrodes E of a cable segment 10A (Final Act. 7; Ans. 6, citing Südown ¶¶ 24, 26). Appellant's argument, which focuses on Südown's modules 50, does not address the Examiner's interpretation and findings that Südown's cable segments 10A function as connectors and at least a portion of the segments 10A (i.e., electrodes E) are electrically conductive and function as an electrode, as recited in claim 1.

In view of the above, Appellant's arguments do not identify a reversible error in the Examiner's rejection of claim 1. Appellant does not argue claims 2, 3, and 7–13 separately from claim 1 (Appeal Br. 7–14).

#### Claims 4–6

Similar to the rejection of claim 1, Appellant argues the Examiner's interpretation of dependent claim 4 is overbroad and inconsistent with Appellant's disclosure because Südown's cable segments 10A cannot be a connector and the modules 50 cannot be streamer sections (Appeal Br. 14–17). Appellant further asserts:

There is nothing disclosed in Südown to suggest that the cable segments (10A(i)-10A(iii)) are different from each other or from cable segments (10A) otherwise. Likewise there is nothing in Südown to suggest that the first, second or third signal processing module (50) are different from each other or from signal processing modules (50) otherwise.

(*id.* at 17).

In response, the Examiner explains that claim 4 is directed to a plurality of cable segments and connectors (i.e., the first streamer section of claim 1 combined with the second connector, second streamer section, third connector, and second digitizer node of claim 4), an example of which is depicted in Appellant's Figure 3 (Ans. 8–9). The Examiner finds Súdow discloses a repeating structure of cable segments 10A(i)–10A(iii) and modules 50 (*id.* at 9). Appellant does not respond to the Examiner's explanation.

As discussed above with regard to the rejection of claim 1, the Examiner's interpretation of "connector" encompassing Súdow's cable section 10A and "streamer section" encompassing Súdow's module 50 is reasonable in light of Appellant's disclosure. Appellant's arguments regarding differences between cable segments or modules appear to relate to the Examiner's finding that Súdow's modules 50 are encompassed by the claimed streamer sections and Súdow's cable segments 10A are encompassed by the claimed connectors. To the extent Appellant argues another point, such as claim 4 requiring streamer sections and/or connectors to differ from one another, we do not see how such an argument relates to the recitations of claim 4, the Examiner's rejection, or otherwise identifies a reversible error with sufficient particularity.<sup>3</sup>

In view of the above, Appellant's arguments are insufficient to identify a reversible error in the Examiner's rejection of claim 4. Appellant does not argue claims 5 and 6 separately from claim 4 (Appeal Br. 14–17).

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<sup>3</sup> In order to overcome the Examiner's rejection, Appellants must identify with sufficient particularity what the Examiner did wrong, i.e., identify a reversible error in the examiner's rejection (*In re Jung*, 637 F.3d 1356, 1365–66 (Fed. Cir. 2011); *Ex parte Frye*, 94 USPQ2d 1072 (BPAI 2010)).

Claims 14–24

Independent claim 14 is reproduced below:

14. A method comprising:  
deploying into a water body a streamer, the streamer comprising a first streamer section having a first connector on an end of the first streamer section;  
measuring a first potential difference between the first connector of the first streamer section and a second potential, the measuring by a first digitizer node disposed within the first streamer section.

Appellant contends Südow discloses measuring a potential between pairs of electrodes arranged on each cable segment 10A, not measuring a potential difference between a first connector of a first streamer section and a second potential, as recited in claim 14 (Appeal Br. 17–18).

Appellant’s arguments are unpersuasive. Similar to the rejection of claim 1, the Examiner finds Südow’s modules 50 function as streamer sections and Südow’s cable segments 10A function as connectors (Final Act. 16). The Examiner finds the cable segments 10A include electrodes E and Südow discloses determining a potential between the electrodes (Ans. 6, 9). Therefore, Appellant’s arguments do not address the Examiner’s rejection of claim 14. For the reasons discussed above with regard to the rejection of claim 1, Appellant’s arguments disputing the Examiner’s interpretation of claim terms (e.g., regarding the terms “streamer section” and “connector,” which appear in claim 14) are unpersuasive.

As a result, Appellant’s arguments do not identify a reversible error in the rejection of claim 14. Appellant does not argue claims 15–24 separately from claim 14 (Appeal Br. 17–18).

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For the reasons discussed above and those set forth in the Examiner's Answer, we sustain the Examiner's § 102 rejection of claims 1–24.

DECISION

The Examiner's rejection of claims 1–24 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