UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

SCIENTIFIC DRILLING INTERNATION, INC.,
Petitioner,

v.

GUNNAR LLLP,
Patent Owner.

PGR2025-00061
U.S. Patent No. 12,110,780

PETITIONER'S OPPOSITION BRIEF TO PATENT OWNER'S REQUEST FOR DISCRETIONARY DENIAL

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I. INTRODUCTION

Institution of Post Grant Review ("PGR") of U.S. Patent No. 12,110,780 (the "'780 Patent") is appropriate under 35 U.S.C. §325(d) since the same or substantially the same prior art or arguments have *not* been presented to or considered by the Office. The grounds for rejection under 35 U.S.C. §112 have also *not* been the subject of any rejection by or arguments to the Office and are strong.

Patent Owner argues without basis that written description and indefiniteness have already been considered by the examiner. In fact, neither was addressed; if it were enough for cumulativeness that the claim language was merely considered by the examiner, *all* indefiniteness and lack of written description challenges in PGRs would be cumulative.

Patent Owner's arguments that the prior art submitted by Petitioner are cumulative are belied by Patent Owner's own statements during prosecution. Patent Owner is not allowed to distinguish prior art for one reason during prosecution and then argue that references that supply those missing elements are cumulative. For the reasons stated more fully below, Patent Owner's request for discretionary denial should be rejected.

II. DISCRETIONARY DENIAL WOULD BE IMPROPER

A. Ground 1 – Lack of Written Description Has Not Been Considered by the Office and Is Strong

Patent Owner argues that the written description grounds are cumulative without citing precedent to support such an argument. Cumulativeness applies to references in an obviousness or anticipation rejection, not lack of written description. Further, even were cumulativeness proper for lack of written description, during examination, the Office never raised a written description rejection. Patent Owner's basis for cumulativeness relies instead on the general principle that the Examiner is presumed to have properly done their job. (Paper 5, p. 27). Under Patent Owner's logic, all PGR requests with written description bases should be denied. This is not the law.

Further, Petitioner has a strong argument on the merits. The specification only refers to a connection between a wire and coiled tubing as either "temporarily" or "permanently" connected without ever reciting "rigid," which was introduced into the claims after the effective filing date of the '780 Patent. (EX. 1001, 5:6-8). Neither "temporarily" or "permanently" connected teaches a "rigid" connection. The '780 Patent specification includes only two possible options for connecting to power depicted in FIG. 2 and FIG. 6, merely schematically showing respectively a connection from a wire to tubing and wired pipe. (EX. 1001, FIGs. 2, 6). Given the foregoing, a POSITA cannot identify

what meets the "rigid" limitation or determine breadth of "rigid connection." (EX. 1009, ¶6).

Patent Owner's newly submitted evidence and expert statements that "the depicted grounding is a *bonded* (emphasis added) rigid connection" or that "the grounding as shown in Figures 2 and 3 is a bonded, permanent, rigid connection" further demonstrate that the POSITA cannot know from the specification if the "rigid connection" requires being "bonded," "permanent" and/or "grounded," for example. (Paper No. 5, page 26; EX. 2011, ¶7). Further, that Patent Owner must rely on expert testimony and outside references to supply the written description for "rigid connection" rather than the specification supports Petitioner's argument that claims of the '780 Patent are invalid for lack of written description.

Patent Owner's request to deny institution should be denied.

B. Ground 2 – Indefiniteness Has Not Been Considered by the Office and Is Strong

Patent Owner also argues that Petitioner's indefiniteness arguments are cumulative without citing precedent to support such argument. The Examiner rejected the claims as indefinite for "drill pipe is a section of drill pipe" and for a claim that "merely repeats a limitation from" the previous claim but *not* with respect to "rigid connection." (EX. 2009, pp. 2-3; EX. 2010, p. 4). Patent Owner again relies on the general presumption that the Examiner is presumed to have properly done their job. (Paper 5, p. 28). As with Ground 1, creating a new

standard for denying institution of PGR as proposed by the Patent Owner based on Ground 2 being a cumulative argument for indefiniteness entirely circumvents the purpose of the PGR and would result in all PGR requests with indefiniteness grounds being denied.

Patent Owner's own arguments and evidence support a determination that the "rigid connection" limitation is indefinite. Patent Owner's newly submitted evidence and expert statements demonstrate that the POSITA cannot know with reasonable certainty if the "rigid connection" requires being "bonded," "permanent" and/or "grounded," for example. (Paper No. 5, page 26; EX. 2011, ¶7). Further, strength of the indefiniteness for "rigid connection" is supported by Patent Owner's own reliance on expert testimony and outside references adding multiple different objective boundaries to a limitation added in prosecution to distinguish from "a spring loaded contacting mechanism" associated with a wireline application. (EX. 1006, pp. 4 and 7).

As described *supra* at section II(A) regarding the "rigid connection" lacking written description, the specification provides no certainty or clarity about the scope of the invention defined by the claims reciting the term "rigid connection." The specification does not include the word "rigid," and there are many possibilities known to a POSITA to connect a wire to tubing that could be depicted by FIG. 2. (EX. 1009, ¶6). Given the foregoing, a POSITA cannot

identify what meets the "rigid" limitation or determine breadth of "rigid connection." (*Id.*).

Patent Owner's request to deny institution should be denied.

C. The Same or Substantially the Same Art or Argument Have Not Been Previously Presented to the Office (*Advanced Bionics* and *Becton, Dickinson* Factors)

Donderici '534 (EX. 1002), Donderici '301 (EX. 1003) and Schultz (EX. 1005) were not considered or argued during prosecution and are materially different than Kuckes (EX. 2001), Donderici/Moss '407 (EX. 2002) and Donderici/Moss '231 (EX. 2003), as shown below.[1]

Patent Owner's singular focus on showing that the references are similar fails to properly analyze the *Advance Bionics* framework. The *Advanced Bionics* framework requires applying not just the similarities between the asserted art and the prior art involved during examination but also their material differences, the cumulative nature of the asserted art and the prior art evaluated during

[1] Patent Owner discusses Donderici/Moss '407 and Donderici/Moss '231 as if they were separate references. They are not. Donderici/Moss '407 is a continuation of Donderici/Moss '231, which thus both have identical specifications and drawings. While collectively referenced as "Donderici/Moss '407 and '231" herein since both are in all relevant respects the same document, all citations are only to Donderici/Moss '407.

examination, and the extent of the overlap between the arguments made during examination and the manner in which Petitioner relies on the prior art or Patent Owner distinguishes the prior art. *Becton, Dickinson & Co. v. B. Braun Melsungen AG,* IPR2017-01586, Paper 8, 17-18 (P.T.A.B. Dec. 15, 2017) (precedential as to § III.C.5, first paragraph). As further shown below in sections C(a)-C(e), discretion to deny institution under § 325(d) is improper since new, noncumulative prior art is asserted in the Petition. *Oticon Medical AB v. Cochlear Ltd.* IPR2019-00975, Paper 15, 20 (P.T.A.B. Oct. 16, 2019) (precedential as to §§ II.B and II.C).

a. Ground 3 – Donderici '534 Is Materially Different, Noncumulative, and Lacks Argument Overlap with Kuckes

Donderici '534 supplies those elements Patent Owner argued during prosecution were missing in Kuckes. This is illustrated in the chart below including the Kuckes citations identified in Patent Owner's Brief requesting discretionary denial at pp. 7 and 17-18 of Paper 5 with emphasis added.

'780 Claim Language	**SDI's Reliance on Donderici '534**	**Kuckes (argued to Patent Office)**
(d) Claims 1, 9 and 19 "at least one wire . . . **is a rigid connection**" **(d) Claim 18** "at least one	"Transmitter may be locally carried on drill string 48, such as part of power module 56, or positioned at the surface **with conducting wiring extending down to emitter electrode E, such as shown in FIG. 1**." (Pet. 17-18, 23-	"The power cable in the **wireline** is connected at the surface to suitable source 24 (FIG. 1) of periodically varying current such as a low-frequency AC to produce alternating current 96 in the cable, and is connected at its lower end to an electrode 92 which is

wire . . . **maintains a continuous electrical connection while the at least one section of drill pipe is drilling**"	24, 29-30; EX1002, 7:31-38) "**FIG. 1 may be a measurement-while-drilling** or logging-while-drilling system in which passive ranging can be utilized **to guide drill bit 54 while a drill string is deployed in wellbore 28**." (Pet. 35; EX. 1002, 4:11-15).	uninsulated and is located on the wireline for electrical communication with the interior of the isolated drill pipe section 57. This electrode may physically contact the interior of section 57 **by way of spring-loaded contacts**, for example" (EX2001, 10:4-12)

In response to an anticipation rejection based on Kuckes, Patent Owner argued "Kuckes teaches that the spring loaded contacts do not maintain a connection between the wire 90 and the pipe 57." (EX. 1010, p. 7). Moreover, Patent Owner responded to an anticipation rejection based on Kuckes in parent application 17/482,045 distinguishing Kuckes' wireline and paused drilling with numerous distinguishing statements exemplarily including: (i) "Kuckes has a spring loaded contacting mechanism, which is not a rigid connection;" (ii) "one of skill in the art would not think to use a rigid connection in the system of Kuckes;" (iii) "Kuckes does not mention a rigid connection from a surface wire;" (iv) "in Kuckes there is no solid wire that reaches from downhole to surface;" (vi) "data transmission rate without wired connections (as in Kuckes) is several orders of magnitude slower than the applicants system;" and (vii) "a significant advance over Kuckes because it allows continuous drilling." (EX. 1006, pp. 6-9).

Donderici ‘534 teaches that conducting wiring extends as shown in FIG. 1 (which is not described/depicted as wireline, only FIGs. 3F-G of Donderici ‘534 show wireline embodiments) and that FIG. 1 may be a measurement-while-drilling. (EX1002, 7:31-38; 4:11-15 and FIGs. 3F-G). Donderici ‘534 unlike Kuckes thus (i) is not a spring loaded contacting mechanism, *i.e.*, is a rigid connection[2]; (ii) discloses that one of skill in the art would think to use a rigid connection in magnetic ranging systems; (iii) is a rigid connection from a surface wire; (iv) is solid wire that reaches from downhole to surface; (vi) provides high data transmission rate with wired connections and (vii) allows continuous drilling. Donderici ‘534 as shown by these examples addresses numerous arguments made in prosecution regarding Kuckes to obtain patentability for either the “rigid connection” recited in claims 1, 9 and 19 or “a continuous electrical connection while the at least one section of drill pipe is drilling” recited in claim 18. (EX. 1001, 10:35; 10:66; 12:17; 11:32-35). Moreover, Donderici ‘534 with the

[2] Given the indefiniteness of “rigid connection,” ambiguity remains regarding this term. Nevertheless, Petitioner attempts to apply the “rigid connection” claim element herein with respect to *Becton, Dickinson* factors and the unpatentability over prior art even though bounds of the claims including “rigid connection” are not reasonably certain. *See, Intel Corp. v. Qualcomm Inc.*, 21 F.4th 801, 812-14 (Fed. Cir. 2021).

foregoing material differences from Kuckes supports motivation for combination that may be lacking in Kuckes for the obviousness-based rejection in Ground 3.

Discretion to deny institution under § 325(d) is improper for Ground 3 based on *Becton Dickinson* factors (a), (b) and (d) showing Donderici '534 being new and not cumulative to Kuckes.

b. Ground 3 – Donderici '534 Is Materially Different, Noncumulative, and Lacks Argument Overlap with Donderici/Moss '407 and '231

Donderici '534 teaches "causing electrical energy to exit a section of drill pipe" that was not disclosed in Donderici/Moss '407 and '231 as shown in the chart below including the Donderici/Moss '407 and '231 citations identified in Patent Owner's Brief requesting discretionary denial at pp. 7-8 of Paper 5 with emphasis added.

'780 Claim Language	**SDI's Reliance on Donderici '534**	**Donderici/Moss '407 and '231 (submitted to Patent Office)**
(d) Claims 1, 9 and 18 "at least one wire inside the at least one section of drill pipe"	"Transmitter may be locally carried on drill string 48, such as part of power module 56, or positioned at the surface **with conducting wiring extending down to emitter electrode E, such as shown in FIG. 1**." (Pet. 17-18, 23-24, 29-30; EX1002, 7:31-38)	"Transmitter, 38 may be locally positioned relative to emitter electrode E, or positioned at a location removed from emitter electrode E in electrical contact with electrode E via conductive wiring. Likewise, power and communications **to EM sensor 51** may be carried locally by appropriate modules 56-62 or may be transmitted via conveyance system 48." (Id., 4:56-62)

(e) Claims 1, 9 and 18 "a first electrically insulated member… **causing electrical energy to exit a section of drill pipe**;"	"current injection system 50 (emitter E and return R electrodes) that injects alternating currents (AC) into formation" (Pet. 19, 24, 30; EX1002, 4:65-67 "one or more insulators or gap subs G deployed along the string **to insulate one or more of the emitter electrode E**, one or more of the return electrodes R and the EM sensor(s) 51" (Pet. 19, 24, 30; EX1002, 5:30-32) "In FIG. 3C, an emitter electrode E is shown downhole of return electrode R, but in close proximity thereto. In the embodiment, a first gap sub G1 is **deployed on the drill string 48 between emitter electrode E and return electrode R** to ensure that current is not conducted from emitter electrode E to return electrode R by drill string 48." (Pet. 19, 24, 30; EX1002, 5:59-64) "**power and communications to current injection system 50**, if any, may be carried locally by the appropriate modules 56-62 or may be transmitted via conveyance system." (Pet. 19, 25, 30-31; EX1002, 4:18-21)	"current injection system, namely emitter electrode E and return electrode R, injects alternating currents (AC) into formation" (EX2002, 4:26-28) "In certain embodiments, one or more insulators or gap subs G deployed along conveyance mechanism 48 **to insulate the return electrodes R from the EM sensor 51**, and in particular, to inhibit current 34c from traveling along conveyance mechanism 48 from return electrode R to EM sensor 51." (EX2002, 8:16-21) "**power and communications to EM sensor 51** may be carried locally by appropriate modules 56-62 or may be transmitted via conveyance system." (EX2002, 4:59-62)

To visualize the emphasized differences, FIG. 1 in Donderici ‘534 shows:

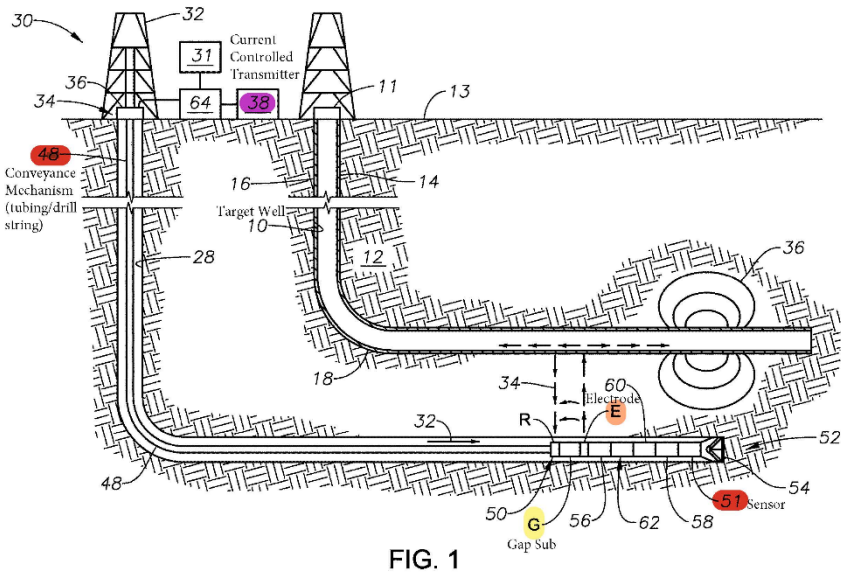


FIG. 1

(EX. 1002, FIG. 1).

In contrast, FIG. 1A in Donderici/Moss ‘407 and ‘231 shows:

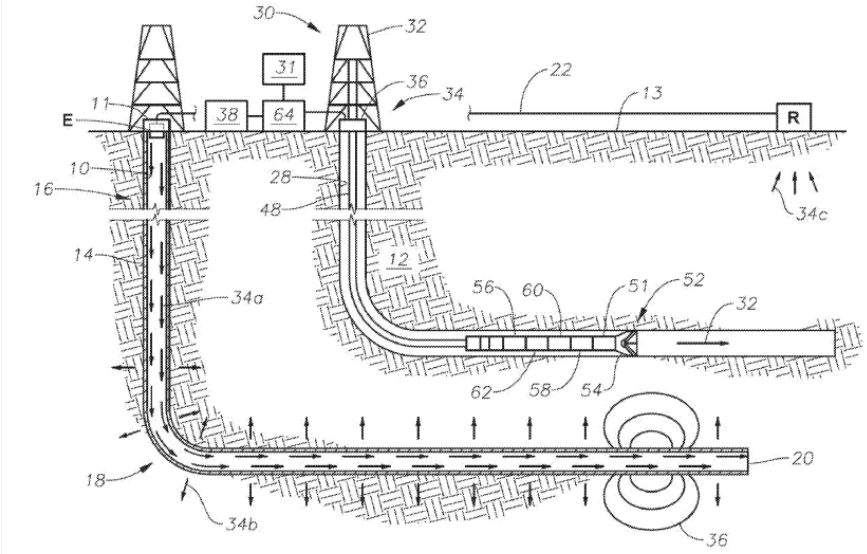


FIG. 1A

(EX. 2002, FIG. 1A).

In FIG. 1A of Donderici/Moss ‘407 and ‘231, the emitter electrode E is located at the surface. (EX. 2002, 2:36-38). None of the Figures in Donderici/Moss ‘407

and ‘231 show the emitter electrode on the drill string with the drill bit. Accordingly, power and communication in Donderici/Moss ‘407 and ‘231 as set forth in the chart is to the EM sensor and not the electrode.

By contrast, Donderici ‘534 as set forth in the chart includes the emitter electrode on the drill string. The foregoing material differences in Donderici ‘534 thus show claimed elements including “causing electrical energy to exit a section of drill pipe” in claims 1, 9 and 18 and “to cause current to flow down the drill pipe and inject into a wellbore formation” in claim 19, which are not disclosed in Donderici/Moss ‘407 and ‘231. (EX. 1001, 10:40-41; 11:3-4; 12:3-4 and 12:18-19).

Discretion to deny institution under § 325(d) is improper for Ground 3 based on *Becton Dickinson* factors (a), (b) and (d) showing Donderici ‘534 being new and not cumulative to Donderici/Moss ‘407 and ‘231.

c. Ground 5 – Donderici ‘301 Is Materially Different, Noncumulative, and Lacks Argument Overlap with Kuckes

Donderici ‘301 teaches wired connections that Patent Owners argued during prosecution were not present in Kuckes as shown from the chart below including the Kuckes citations identified in Patent Owner’s Brief requesting discretionary denial at pp. 17-18 of Paper 5 with emphasis added.

‘780 Claim Language	**SDI’s Reliance on Donderici ‘301**	**Kuckes (argued to Patent Office)**

(d) Claims 1, 9 and 19 "at least one wire . . . **is a rigid connection**" **(d) Claim 18** "at least one wire . . . **maintains a continuous electrical connection while the at least one section of drill pipe is drilling**"	"system control unit 104 may be positioned at the surface 105 as depicted in FIG. 1 and may be communicably or communicatively coupled to downhole elements including, but not limited to, drilling assembly, 107, telemetry system 118, downhole tool 111." (Pet. 40, 46, 53; EX1003, 5:24-28) "communicatively coupled as used herein is intended to mean either **direct** or an indirect **communication connection** . . . Such **wired** and wireless **connections are well known to those of skill in the art**." (Pet. 40, 46, 53; EX1003, 3:29-36) "**FIG. 1 is a diagram showing an illustrative logging while drilling environment**…. In LWD, data is typically **collected during the drilling process**." (Pet. 60; EX. 1003, 1:51-53 and 3:43-44)	"The power cable in the **wireline** is connected at the surface to suitable source 24 (FIG. 1) of periodically varying current such as a low-frequency AC to produce alternating current 96 in the cable, and is connected at its lower end to an electrode 92 which is uninsulated and is located on the wireline for electrical communication with the interior of the isolated drill pipe section 57. This electrode may physically contact the interior of section 57 **by way of spring-loaded contacts**, for example" (EX2001, 10:4-12)

In response to an anticipation rejection based on Kuckes, Patent Owner argued "Kuckes teaches that the spring loaded contacts do not maintain a connection between the wire 90 and the pipe 57." (EX. 1010, p. 7). Moreover, Patent Owner responded to an anticipation rejection based on Kuckes in parent application 17/482,045 distinguishing Kuckes' wireline and paused drilling with

numerous distinguishing statements exemplarily including: (i) "Kuckes has a spring loaded contacting mechanism, which is not a rigid connection;" (ii) "one of skill in the art would not think to use a rigid connection in the system of Kuckes;" (iii) "Kuckes does not mention a rigid connection from a surface wire;" (iv) "in Kuckes there is no solid wire that reaches from downhole to surface;" (vi) "data transmission rate without wired connections (as in Kuckes) is several orders of magnitude slower than the applicants system;" and (vii) "a significant advance over Kuckes because it allows continuous drilling." (EX. 1006, pp. 6-9).

Donderici '301 teaches direct wired connections as opposed to wireline and that the data is collected during the drilling process. (EX. 1003, 3:29-36; 1:51-53 and 3:43-44). Donderici '301 unlike Kuckes thus (i) is not a spring loaded contacting mechanism, *i.e.*, is a rigid connection; (ii) discloses that one of skill in the art would think to use a rigid connection in magnetic ranging systems; (iii) is a rigid connection from a surface wire; (iv) is solid wire that reaches from downhole to surface; (vi) provides high data transmission rate with wired connections and (vii) allows continuous drilling. Donderici '301 as shown by these examples addresses numerous arguments regarding Kuckes made in prosecution to obtain patentability for either the "rigid connection" recited in claims 1, 9 and 19 or "a continuous electrical connection while the at least one section of drill pipe is drilling" recited in claim 18. (EX. 1001, 10:35; 10:66; 12:17; 11:32-35).

Moreover, Donderici '301 reciting that wired connections are well known supports motivation for combination that may be lacking in Kuckes for the obviousness-based rejection in Ground 5.

Discretion to deny institution under § 325(d) is improper for Ground 5 based on *Becton Dickinson* factors (a), (b) and (d) showing Donderici '301 is new and not cumulative to Kuckes.

d. Ground 5 – Donderici '301 Is Materially Different, Noncumulative, and Lacks Argument Overlap with Donderici/Moss '407 and '231

In contrast to Donderici/Moss '407 and '231, Donderici '301 teaches nearly word-for-word claim language "causing electrical energy to exit a section of drill pipe" as shown in the chart below including the Donderici/Moss '407 and '231 citations identified in Patent Owner's Brief requesting discretionary denial at pp. 7-8 and of Paper 5 with emphasis added.

'780 Claim Language	**SDI's Reliance on Donderici '301**	**Donderici/Moss '407 and '231 (submitted to Patent Office)**
(d) Claims 1, 9 and 18 "at least one wire inside the at least one section of drill pipe"	"system control unit 104 may be positioned at the surface 105 as depicted in FIG. 1 and may be communicably or communicatively coupled to downhole elements including, but not limited **to, drilling assembly, 107, telemetry system 118, downhole tool 111**." (Pet. 40, 46, 53; EX1003, 5:24-28)	"Transmitter, 38 may be locally positioned relative to emitter electrode E, or positioned at a location removed from emitter electrode E in electrical contact with electrode E via conductive wiring. Likewise, power and communications **to EM sensor 51** may be carried locally by appropriate modules 56-62 or may be transmitted via

	"communicatively coupled as used herein is intended to mean either direct or an indirect communication connection . . . . Such wired and wireless connections are well known to those of skill in the art." (Pet. 40, 46, 53; EX1003, 3:29-36)	conveyance system 48." (Id., 4:56-62)
(e) Claims 1, 9 and 18 "a first electrically insulated member… **causing electrical energy to exit a section of drill pipe**;"	"gap sub 112 is located between the electrodes 130 (for example, survey electrode 130a and return electrode 130b to electrically insulate two portions of the BHA 109 and to prevent shorting." (Pet. 41, 47, 54; EX1003, 9:20-24) "**current 134 may be induced within the formation 102 by energizing the survey electrode 130a of the drilling assembly 107**" (Pet. 41, 47, 54; EX1003, 4:65-5:1)	"current injection system, namely emitter electrode E and return electrode R, injects alternating currents (AC) into formation" (EX2002, 4:26-28) "In certain embodiments, one or more insulators or gap subs G deployed along conveyance mechanism 48 **to insulate the return electrodes R from the EM sensor 51**, and in particular, to inhibit current 34c from traveling along conveyance mechanism 48 from return electrode R to EM sensor 51." (EX2002, 8:16-21) "**power and communications to EM sensor 51** may be carried locally by appropriate modules 56-62 or may be transmitted via conveyance system." (EX2002, 4:59-62)

To visualize the emphasized differences, FIG. 1 in Donderici '301 shows:

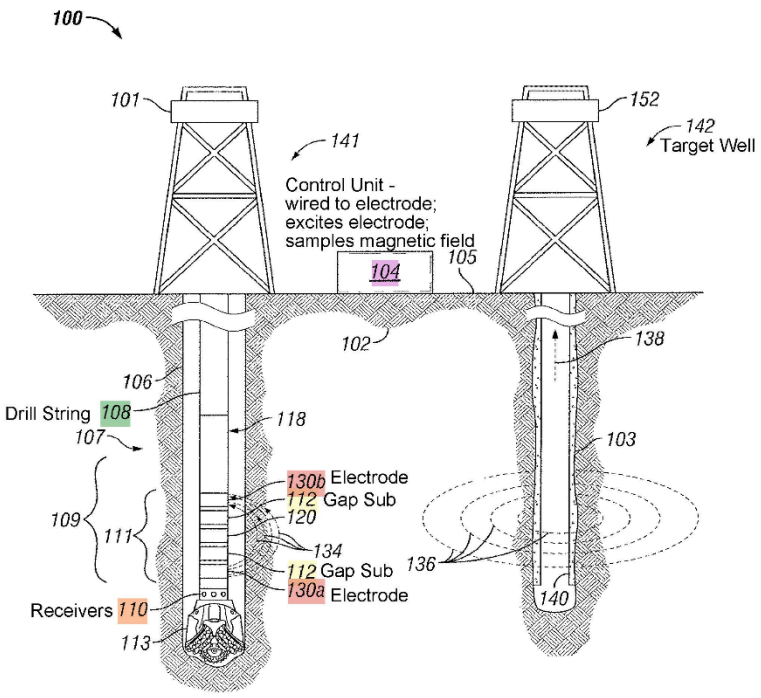


FIG. 1

(EX. 1003, FIG. 1).

In contrast, FIG. 1A in Donderici/Moss '407 and '231 shows:

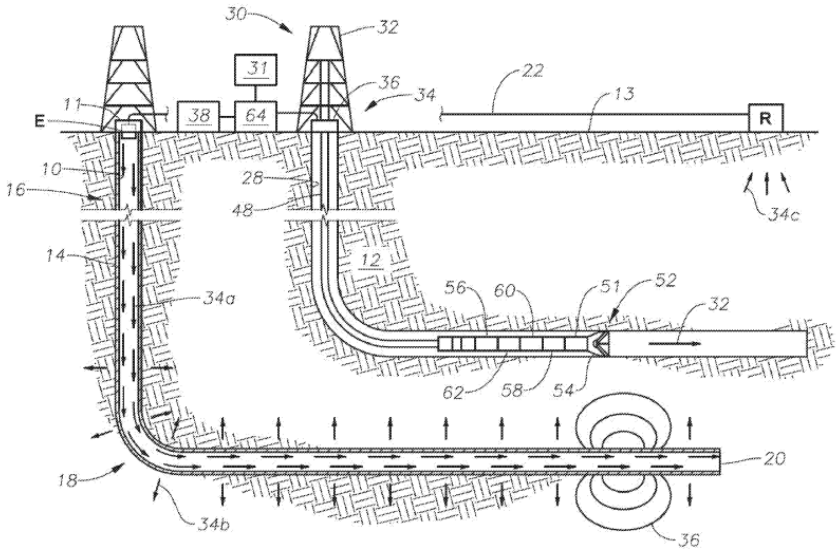


FIG. 1A

(EX. 2002, FIG. 1A).

In FIG. 1A of Donderici/Moss ‘407 and ‘231, the emitter electrode E is located at the surface. (EX. 2002, 2:36-38). None of the Figures in Donderici/Moss ‘407 and ‘231 show the emitter electrode on the drill string with the drill bit. Accordingly, power and communication in Donderici/Moss ‘407 and ‘231 as set forth in the chart is to the EM sensor and not the electrode.

By contrast, Donderici ‘534 as set forth in the chart includes the emitter electrode on the drill string. The foregoing material differences in Donderici ‘534 show claimed elements including “causing electrical energy to exit a section of drill pipe” in claims 1, 9 and 18 and “to cause current to flow down the drill pipe and inject into a wellbore formation” in claim 19, which are not disclosed in Donderici/Moss ‘407 and ‘231. (EX. 1001, 10:40-41; 11:3-4; 12:3-4 and 12:18-19).

Discretion to deny institution under § 325(d) is improper for Ground 5 based on *Becton Dickinson* factors (a), (b) and (d) showing Donderici ‘301 is new and not cumulative to Donderici/Moss ‘407 and ‘231.

e. Grounds 4 and 6 – Schulz Is Materially Different, Noncumulative, and Lacks Argument Overlap with Donderici/Moss ‘407 and ‘231 or Kuckes

Grounds 4 and 6 cover invalidity of dependent claims 7 and 16 reciting “multiribbon wire.” Donderici/Moss ‘407 and ‘231 or Kuckes do not teach ribbon

cable, as does Schulz. (EX. 1005, 3:37-41). Schulz thus includes material differences to Donderici/Moss ‘407 and ‘231 or Kuckes.

Further, Schulz with these material differences used to modify new, noncumulative references Donderici ‘301 or Donderici ‘534 in combination with Fredriksen provides no overlap with arguments made during examination. As Patent Owner states in its Brief requesting discretionary denial, “the Examiner cited Kuckes and stated that with regard to ‘claim 7, [Kuckes] discloses that the power supply (24) is connected to the drill pipe (57) using at least one wire (90) of a multiribbon wire (the wireline is disclosed as capable of carrying data and current, hence it is inherently a multiribbon wire).’” (Paper 5, pp. 14 and 24; EX. 1007, p. 5). The dependent claim 7 was allowed after amendment of its independent claim.

The anticipation evaluation of Kuckes by the Office during examination was thus argued based on limitations of the independent claims, which were subsequently amended to differentiate from Kuckes. No arguments made during examination included subject matter with the limitations of dependent claim 7 based on the amended independent claim or any obviousness-based combinations. Patent Owner contending disclosure of a twisted wire pair in Donderici/Moss ‘407 and ‘231 or 7-wire wireline in Kuckes continues to prove limitations in these dependent claims 7 and 16 fail to support patentability in any scenario lacks basis

to deny institution since not relevant to analysis required to assess the Grounds 4 or 6 with the new reference Shulz. (Paper 5, pp. 13-14).

Discretion to deny institution under § 325(d) is improper for Grounds 4 or 6 based on *Becton Dickinson* factors (a), (b) and (d) showing Schulz is new and not cumulative to Donderici/Moss '407 and '231 or Kuckes.

III. Conclusion

For the foregoing reasons, the Board should not discretionarily deny institution of the PGR under 35 U.S.C. §325(d).

Date: October 15, 2025

/Michael Locklar/

Michael Locklar
Reg. 44,878
EWING & JONES, PLLC
6363 Woodway, Suite 1000
HOUSTON, TEXAS 77057
832-830-8945 Direct Dial
Attorney for Petitioner

CERTIFICATION OF SERVICE

I hereby certify that the above document was served on October 15, 2025, via email to the attorney of record at the following address:

Brian K. Buss,
brian@bussbenefield.com

Michael Benefield
michael@bussbenefield.com

Date: October 15, 2025

/Michael Locklar/
Michael Locklar
Reg. 44,878

LIST OF EXHIBITS

Exhibit No.	Title
1001	U.S. Patent No. 12,110,780 ("the '780 Patent")
1002	U.S. Patent No. 10,429,534 ("Donderici '534")
1003	U.S. Patent No. 10,656,301 ("Donderici '301")
1004	US. Patent No. 11,236,551 ("Fredriksen")
1005	U.S. Patent No. 9,771,791 ("Schulz")
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2011	Declaration of Clinton Moss