

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE PATENT TRIAL AND APPEAL BOARD

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FMC TECHNOLOGIES, INC.,  
Petitioner,

v.

ONESUBSEA IP UK LIMITED,  
Patent Owner.

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Case IPR2016-00378  
Patent 8,272,435 B2

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Before JOSIAH C. COCKS, CARL M. DEFRANCO, and  
MICHELLE N. WORMMEESTER, *Administrative Patent Judges*.

DEFRANCO, *Administrative Patent Judge*.

DECISION TO INSTITUTE  
*37 C.F.R. § 42.108*

## I. INTRODUCTION

This is a preliminary proceeding to decide whether *inter partes* review of U.S. Patent No. 8,272,435 B2 (“the ’435 patent”) should be instituted under 35 U.S.C. § 314(a). OneSubsea IP UK Limited (“OneSubsea”) is the owner of the ’435 patent. FMC Technologies, Inc. (“FMC”) filed a Petition (“Pet.”) seeking *inter partes* review of claims 1–9 and 11–14 of the ’435 patent. OneSubsea, in turn, filed a Preliminary Response (“Prelim. Resp.”). After considering the Petition and Preliminary Response, we institute *inter partes* review on all of the challenged claims.

## II. BACKGROUND

### A. *The ’435 Patent*

The ’435 patent relates to a Christmas tree system for an oil or gas wellhead. Ex. 1001, 1:51–58. Christmas trees are well known in the art of oil and gas wells, and comprise an assembly of pipes, valves, and fittings installed on a wellhead for controlling the flow of oil or gas from the well to a production flow line. *Id.* As described, this particular Christmas tree system includes a “diverter assembly,” connected to a “branch” of the tree, for diverting fluid flow from its “usual path” in the production flow line to a “processing apparatus,” followed by recovery and return of the fluid to a “branch outlet” for communication with the production flow line. *Id.* at 2:44–3:37, 4:5–52.

### B. *The Related District Court Action*

The ’435 patent is involved in a concurrent district court action, *OneSubsea IP UK Ltd. v. FMC Techs., Inc.*, No. 4:16-cv-00051 (S.D. Tex.), which commenced March 30, 2015. Paper 5.

*C. The Challenged Claims*

Of the challenged claims, only claim 1 is independent and recites:

1. A system, comprising:
  - a branch of a mineral extraction tubing, wherein the branch comprises a branch outlet; and
  - a diverter assembly coupled to the branch, wherein the diverter comprises a first fluid path to a diverter outlet and a second fluid path from a diverter inlet to the branch outlet.

Ex. 1001, 34:13–19.

*D. The Asserted Grounds*

FMC’s Petition raises statutory grounds of anticipation under 35 U.S.C. § 102 and obviousness under 35 U.S.C. § 103. Specifically, FMC asserts that:

1. claims 1–8 and 13 are anticipated by Kelly;<sup>1</sup>
2. claims 8 and 9 are unpatentable as obvious over Kelly and Fenton;<sup>2</sup>
3. claims 1–8 and 13 are unpatentable as obvious over Kelly and Bednar;<sup>3</sup>
4. claims 8 and 9 are unpatentable as obvious over Kelly, Bednar, and Fenton;
5. claims 1–8 and 11–14 are anticipated by Clair;<sup>4</sup>
6. claims 8 and 9 are unpatentable as obvious over Clair and Fenton;
7. claims 1–8 and 13 are anticipated by Bednar;

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<sup>1</sup> U.S. Patent No. 4,589,493, iss. May 20, 1986 (“Kelly”) (Ex. 1004).

<sup>2</sup> U.S. Pat. App. No. 2002/0070026 A1, pub. June 13, 2002 (“Fenton”) (Ex. 1005).

<sup>3</sup> U.S. Patent No. 5,010,956, iss. Apr. 30, 1991 (“Bednar”) (Ex. 1007).

<sup>4</sup> U.S. Patent No. 2,638,917, iss. May 19, 1953 (“Clair”) (Ex. 1006).

8. claims 8 and 9 are unpatentable as obvious over Bednar and Fenton.

Pet. 4–5. As additional support, FMC proffers the declaration of Robert Herrmann (Ex. 1003).

### III. ANALYSIS

In this preliminary proceeding, we determine whether FMC has demonstrated a reasonable likelihood that “at least 1 of the claims challenged in the petition” is unpatentable. 35 U.S.C. § 314(a). As always, our goal is “the just, speedy, and inexpensive resolution” of the validity of the challenged claims. 37 C.F.R. § 42.1(b).

#### A. *The Clair-based Grounds*

To begin, we address grounds 5 and 6 of the Petition, in which FMC proffers Clair as a primary basis for unpatentability of the challenged claims. Pet. 5. Specifically, FMC challenges claims 1–8 and 11–14 as anticipated by Clair, and, in addition, challenges claims 8 and 9 as rendered obvious by Clair plus another reference, Fenton. *Id.* at 32–47. Independent claim 1, from which all of the other challenged claims depend, requires a mineral extraction system that includes a “branch” coupled to a “diverter assembly.” Ex. 1001, 34:13–19. As claimed, the diverter assembly comprises a “first fluid path” that diverts fluid away from the branch and a “second fluid path” that returns the fluid to a “branch outlet.” *Id.* at 34:16–19.

FMC asserts that Clair discloses an oil and gas well system that includes a branch and diverter assembly according to claim 1. Pet. 32–37. We agree, at least insofar as the initial record indicates. A comparison of Figure 22 of the ’435 patent to Figure 3 of Clair, depicted below, illustrates the identity of the claimed system to Clair’s system.

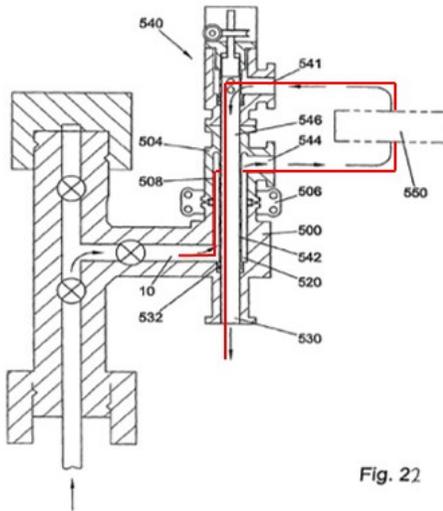
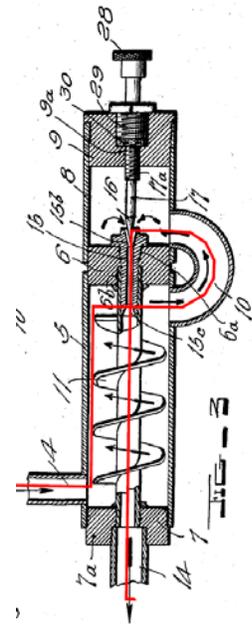


Fig. 22

'435 Patent, Fig. 22 (annotated)



Clair, Fig. 3 (annotated)

Each of the above figures depicts an oil and gas wellhead system comprising an assembly of concentric passages for diverting fluid flow (shown in red) from a branch of the wellhead to a processing apparatus. More specifically, like claim 1, Clair's well head includes a branch ("inlet connection 4") coupled to a diverter assembly ("chamber 5"), in which fluid travels along a first flow path ("spiral baffle 11"), to an outlet ("turn tube 10"). Ex. 1006, 4:74–5:15, Fig. 3. From there, the fluid enters a processing apparatus ("choke cylinder 8") before returning to the diverter assembly through an inlet ("nozzle 15c") and traveling along a second flow path ("chamber 12"), in a direction opposite the first flow path, to a branch outlet ("discharge pipe 14"). *Id.*, Fig. 7; *see also* Pet. 36 (depicting bi-directional flow paths).

At this time, FMC persuades us that Clair's fluid extraction system meets each and every element of claim 1. We are not persuaded by OneSubsea's contention that the Petition fails to construe the claims or

explain the prior art specifically enough. *See* Prelim. Resp. 3–11. Rather, in our view, the Petition provides full and adequate support, through annotated figures and a detailed claim chart, of how claim 1 reads on Clair. Pet. 32–37; Ex. 1003 ¶¶ 39–52. Thus, on this record, we determine that FMC has demonstrated a reasonable likelihood of proving that at least claim 1 of the ’435 patent is anticipated by Clair.

Having decided that Clair evinces a reasonable likelihood that at least one of the claims challenged in the Petition is unpatentable, we exercise our discretion under 37 C.F.R. § 42.108 to have the review proceed on *all* of the challenged claims on which Clair is proffered as the basis of anticipation, namely, claims 1–8 and 11–14. In doing so, we seek to achieve finality of review at the Board and avoid parallel or serial review at the district court, at least with respect to FMC and the claims challenged on the basis of Clair. *See Intex Recreation Corp. v. Bestway Inflatables & Material Corp.*, IPR2016-00180, Paper 13, at 8–11 (PTAB Jun. 6, 2016); *see also Synopsys, Inc. v. Mentor Graphics Corp.*, 814 F.3d 1309, 1316 (Fed. Cir. 2016) (stating that “[t]he validity of claims for which the Board did not institute inter partes review can still be litigated in district court”).

Also, we are “cognizant of the ramifications of partial institution where the grounds are in different statutory classes.” *Amendments to the Rules of Practice for Trials Before the Patent Trial and Appeal Board*, 80 Fed. Reg. 50720, 50739 (Aug. 20, 2015) (Response to Comment 12). As such, concerns of fairness and efficiency in this case persuade us to institute not only on the ground of anticipation by Clair but also on the ground of obviousness in which Clair forms the basis of the challenge against claims 8 and 9. *See HP Inc. v. MPHJ Tech. Inv., LLC*, 817 F.3d 1339, 1347 (Fed.

Cir. 2016) (holding that petitioner was “not estopped from raising the obviousness of claim 13 in a subsequent court or Board proceeding” where Board instituted only on grounds of anticipation of claim 13).

*B. The Kelly-based Grounds*

FMC also challenges claims 1–8 and 13 as anticipated by Kelly and claims 1–9 and 13 as obvious over Kelly in view of various combinations with Bednar and Fenton. Pet. 7–32. From our initial review, Kelly discloses a “Christmas tree” wellhead that includes a branch (“line 20”) and a diverter assembly (“collet body 22”). Ex. 1004, 2:16–29, Fig. 1. As described, the diverter assembly comprises a first fluid path (“passage 64”) for diverting the fluid to a processing apparatus (“choke assembly 26”) and a second fluid path (“passage 66”) for returning the fluid to a branch outlet (“line 24”). *Id.* at 2:34–65, Fig. 3. On this record, we determine that FMC has demonstrated a reasonable likelihood of proving that at least claim 1 is anticipated by Kelly. Having reached that conclusion, we exercise our discretion to institute *inter partes* review on all of the claims challenged on the basis of anticipation by Kelly, i.e., claims 1–8 and 13. *See Intex, supra*. Also, as discussed above, reasons of fairness and efficiency persuade us to institute not only on the ground of anticipation by Kelly but also on the grounds of obviousness in which Kelly serves as the primary basis for the challenge, namely, grounds 2–4.

*C. The Bednar-based Grounds*

FMC also challenges claims 1–8 and 13 as anticipated by Bednar and claims 8 and 9 as obvious over Bednar and Fenton. Pet. 47–59. Bednar describes a well-bore tree cap that diverts fluid away from the tree for further processing, for example, controlling pressure and production rates of

the fluid. Ex. 1007, 1:14–21, 3:61–4:10, Fig. 2. And, like claim 1, Bednar’s tree cap has a branch in which fluid is diverted away from the main flow line (“production line 32”) through a first fluid path (“tree flow passage 18”) to a pressure control assembly (“choke 38”) and then returned along a second fluid path (“choke return line 52”) to a branch outlet (“wing valve 34”). *Id.* at 3:66–4:3, Fig. 2; Ex. 1003 ¶¶ 56–59. On this record, FMC persuades us that Bednar’s tree cap anticipates each and every element of claim 1. *See* Pet. 47–51. And, having decided that FMC demonstrates a reasonable likelihood of proving that at least claim 1 of the ’435 patent is anticipated by Bednar, we exercise our discretion under 37 C.F.R. § 42.108 to have the review proceed on all of the challenged claims and all of the asserted grounds on which Bednar serves as the basis for the challenge, namely, claims 1–9 and 13 and grounds 7 and 8. *See Intex, supra.*

#### IV. CONCLUSION

After considering the evidence and arguments presented in the Petition and Preliminary Response, we determine that FMC has demonstrated a reasonable likelihood of success in proving that at least independent claim 1 of the ’435 patent is unpatentable. And, in keeping with our mission of resolving patent validity disputes in a just, speedy, and inexpensive manner, we exercise our discretion to institute *inter partes* review on all of the challenged claims and on all of the asserted grounds, as raised in the Petition.

#### V. ORDER

Accordingly, it is hereby:

ORDERED that, pursuant to 35 U.S.C. § 314(a), an *inter partes* review of claims 1–9 and 11–14 of the ’435 patent is *instituted* on the

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statutory grounds of anticipation under 35 U.S.C. § 102 and obviousness under 35 U.S.C. § 103 as asserted in the Petition and identified in section II. D. above; and

FURTHER ORDERED that, pursuant to 35 U.S.C. § 314(c) and 37 C.F.R. § 42.4(b), *inter partes* review of the '435 patent shall commence on the entry date of this Order, and notice is hereby given of the institution of a trial.

FOR PETITIONER:

Joshua A. Griswold  
Craig A. Deutsch  
Kenneth W. Darby, Jr.  
FISH & RICHARDSON P.C.  
[IPR29188-0023IP1@fr.com](mailto:IPR29188-0023IP1@fr.com)  
[griswold@fr.com](mailto:griswold@fr.com)  
[deutsch@fr.com](mailto:deutsch@fr.com)  
[kdarby@fr.com](mailto:kdarby@fr.com)  
[PTABInbound@fr.com](mailto:PTABInbound@fr.com)

FOR PATENT OWNER:

Michael L. Kiklis  
Christopher Ricciuti  
Katherine D. Cappaert  
OBLON, MCCLELLAND, MAIER & NEUSTADT, LLP  
[CPDocketKiklis@oblon.com](mailto:CPDocketKiklis@oblon.com)  
[CPDocketRicciuti@oblon.com](mailto:CPDocketRicciuti@oblon.com)  
[CPDocketCappaert@oblon.com](mailto:CPDocketCappaert@oblon.com)