

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

ENSIGN US SOUTHERN DRILLING LLC
Petitioner
v.

C&M OILFIELD RENTALS, LLC
D/B/A C-MOR ENERGY SERVICES
Patent Owner of Record

Inter Partes Review No.
IPR2024-00005
Patent No. 10,900,626
Filing Date: September 16, 2019
Issue Date: January 26, 2021

PETITION FOR *INTER PARTES* REVIEW

TABLE OF CONTENTS

I.	Introduction.....	7
II.	IPR Requirements.....	8
	A. Standing.....	8
	B. Challenge.....	9
III.	Background.....	11
	A. The ‘626 Patent	12
	B. The Relevant Prosecution History of the ‘626 Patent.....	13
IV.	Expert Testimony, Level of Skill in the Art, Claim Construction	18
	A. Declaration Evidence	18
	B. Level of Skill in the Art.....	18
	C. Claim Construction.....	18
V.	Prior Art.....	21
	A. PCT Publication WO 2018/042348 (“Gowanlock 1”).....	22
	B. U.S. Patent No. 9,316,390 (“Gowanlock 2”)	25
	C. Swivelpole Product Catalogue NEC V2-4. Printed March 2014 (“Swivelpole catalog”)	27
	D. Larson Electronics / Magnalight YouTube video at https://www.youtube.com/watch?v=EWXJeKNRs00 (copyright 2004-2012) (Ex. 1006)	31
	E. The Motivations to Modify the Prior Art As Described in this Petition Are Expressly Found in the ‘626 Patent Background	34
VI.	Motivation to Combine.....	36
	A. Gowanlock 1 and Swivelpole catalog.....	36

Petition for *Inter Partes* Review
U.S. Patent No. 10,900,626

B.	Gowanlock 2 and Swivelpole catalog.....	43
C.	Gowanlock 1 or Gowanlock 2 with Larson Electronics / Magnalight YouTube video at https://www.youtube.com/watch?v=EWXJeKNRs00	51
VII.	Claims 9 and 19 Are Invalid.....	60
A.	Ground 1: Claims 9 and 19 are Obvious Over Gowanlock 1 in view of Swivelpole catalog.....	60
B.	Ground 2: Claims 9 and 19 are Obvious Over Gowanlock 2 and the Swivelpole Catalog	69
C.	Ground 3: Claims 9 and 19 are Obvious Over Gowanlock 1 or Gowanlock 2 in view of the Magnalight YouTube Video	81
VIII.	Secondary Considerations Cannot Overcome the Strong Evidence of Obviousness	96
IX.	This Petition Should Not Be Discretionarily Denied	97
X.	Conclusion	100
XI.	Mandatory Notices.....	101
A.	Real Parties in Interest (37 C.F.R. § 42.8(b)(1)).....	101
B.	Related Matters (37 C.F.R. § 42.8(b)(2)).....	101
C.	Designation of Lead and Backup Counsel (37 C.F.R. § 42.8(b)(3)) and Service Information (37 C.F.R. § 42.8(b)(4))	102
D.	Payment of Fees (37 C.F.R. § 42.103).....	102
E.	Power of Attorney (37 C.F.R. § 42.10).....	103
	CERTIFICATE OF SERVICE.....	105

EXHIBIT LIST

Exhibit No.	Description
1001	U.S. Patent No. 10,900,626 (“the ‘626 Patent”)
1002	Prosecution History of U.S. Patent No. 10,900,626
1003	WO 2018/042348 (“Gowanlock 1”)
1004	Swivelpole Product Catalogue NEC V2-4. Printed March 2014 (Swivelpole Catalog)
1005	Larson Article
1006	Larson Electronics / Magnalight YouTube video (copyright 2004-2012)
1006-A	Screenshot of Larson Electronics / Magnalight YouTube video (copyright 2004-2012) page
1007	Curriculum Vitae of Jake Hamdan
1008	Declaration of Jake Hamdan
1009	‘016 Claim Construction Order in <i>C&M Oilfield Rentals, LLC v. Apollo Lighting Solutions, Inc. and Cleantek Industries, Inc.</i> , Civil Action No. 6:21-CV-00544-ADA, Western District of Texas, Waco Division
1010	Docket sheet showing March 10, 2023 date of service of second amended complaint adding ‘626 patent infringement allegations and amended complaint (Dkt. 44)
1011	June 9, 2022 K. Vidal Memo on Admissions
1012	Collection of Rig Photos referred to in Hamdan declaration; named as Ex. 1012-1, 1012-2, 1012-3, 1012-4, 1012-5, 1012-6, and 1012-7

Petition for *Inter Partes* Review
U.S. Patent No. 10,900,626

Exhibit No.	Description
1012-A	Collection of Rig Photos referred to in Hamdan declaration; names as Ex. 1012-A-1, 1012-A-2, and 1012-A-3
1013	Photos referred to in Hamdan declaration; named as Ex. 1013-1, 1013-2, and 1013-3
1014	Screen capture of 2017 Lighting Catalog referred to in Hamdan declaration from Wayback Machine link at Scaffold / Rail Mount Rig Lights - Larson Electronics (archive.org)
1015	Collection of YouTube Videos referred to in Hamdan declaration as Exhibits 1015-1 to 1015-4
1016	Patent Owner of Record March 27, 2023 Proposed Claim Terms
1017	Dkt. 35 C&M v. Ensign Scheduling Order
1018	Director Vidal Memorandum re: <i>Interim Procedure for Discretionary Denials in AIA Post-Grant Proceedings with Parallel District Court Litigation</i> , June 22, 2022
1019	US Publication 2015/0184840 (2015 Gowanlock 1 ‘840)
1020	U.S. Pat. 181,613 to Woodward et al.
1021	U.S. Pat. 223,898 to Edison
1022	U.S. 2015/0138780 to Yoshizawa et al.
1023	U.S. Pat. 3,696,241 to Meyer et al.
1024	U.S. Pat. 3,856,639 to Rohn t al.
1025	U.S. Pat. 4,903,442 to Trommen
1026	U.S. Pat.4,937,717 to Betzvog, Jr.
1027	U.S. Pat. 5,272,611 to Lai

Petition for *Inter Partes* Review

U.S. Patent No. 10,900,626

Exhibit No.	Description
1028	U.S. Pat. 6,155,696 to Winton et al.
1029	U.S. Pat. 788,707 to Coverstone
1030	US 2006/0176708 to Gordin et al.
1031	US 2008/0212329 to Duguay et al.
1032	US 2012/0217897 to Gordin et al.
1033	U.S. Pat. 6,155,696 to Winton et al.
1034	U.S. Pat. 4,450,507 to Gordin
1035	U.S. Pat. 5,272,609 to Nelson
1036	U.S. Pat. 6,607,285 to Citron et al.
1037	U.S. Pat. 8,172,438 to Konop
1038	U.S. Pat. 8,439,534 to Roe et al.
1039	U.S. Pat. 8,734,163 to Gordin et al.
1040	U.S. Pat. 8,931,932 to Lipscomb et al.
1041	US 2003/0137840 to Citron et al.
1042	US 2016/0109079 to McKinley et al.
1043	US 2017/0141721 to Schmidt
1044	U.S. Pat. 2,895,039 to Hutchison
1045	US 200/0266859 to Palmisano, Jr.

Petition for *Inter Partes* Review

U.S. Patent No. 10,900,626

Exhibit No.	Description
1046	U.S. Pat. App. Publ. 2005/0083690A1 to Griffin
1047	U.S. Patent No. 1,706,215 to Davidson
1048	U.S. Patent No. 3,358,952 to Burns
1049	U.S. Patent No. 4,595,165 to Klingensmith et al.
1050	U.S. Patent No. 5,060,435 to Bogdanow
1051	U.S. Patent No. 6,283,425 to Liljevik
1052	U.S. Patent No. 6,768,474 to Hunt
1053	U.S. Patent Publ. 2005/0184207 to Bertram III
1054	C&M expert declaration excerpt on POSITA
1055	2 nd C&M expert declaration excerpt on POSITA
1056	Joint Claim Construction Chart
1057	Ensign Markman brief and exhibits
1058	U.S. Patent No. 9,316,390 (“Gowanlock 2”)
1059	Ensign US Markman hearing slides

I. Introduction

Ensign US Southern Drilling LLC (“Petitioner” or “Ensign US”) petitions for IPR of claims 9 and 19 of U.S. Patent 10,900,626 (“‘626 Patent”), assigned to C&M Oilfield Rentals, LLC D/B/A C-Mor Energy Services according to the USPTO assignment records (“Patent Owner of Record”). Claims 9 and 19 are independent claims. A child application of the ‘626 Patent became U.S. Patent 10,976,016 which patent is the subject of currently pending *Inter Partes* Review No. IPR2023-0084 filed March 30, 2023.

The ‘626 patent (Ex. 1001) is entitled, “Elevated Structure-Mounted Lighting System”. Claims 9 and 19 introduce nothing new or nonobvious in the art of lighting systems generally, and the lighting of drilling rigs specifically. The ‘626 Patent admits in the Background that “To ensure even and effective lighting of the well site, lighting systems have previously been installed on the uppermost portion of the drilling rig, also referred to as the “crown” of the rig.” Ex. 1001, 1:14-17. Independent system claim 9 simply recites “a plurality of light units attached to the handrails” of a crown deck. Ex. 1001, 5:65-6:9. Independent method claim 19 similarly recites a “illuminating the wellsite using the plurality of lights.” Ex. 1001, 6:32-41.

As shown below, the use of lights on poles in the oil and gas industry was well-known at the time of filing the application that became the ‘626 Patent for attaching lights to, for example, handrails of decks that are commonly found on elevated

structures such as rigs. During prosecution there were no prior art rejections. Thus, the prior art in this Petition was not applied by the Examiner to the claims nor distinguished by the Patent Owner of Record.

II. IPR Requirements

A. Standing

Petitioner certifies the ‘626 Patent is available for IPR and Petitioner is not barred or estopped from requesting IPR. The ‘626 Patent issued on January 26, 2021. This Petition is filed within one year of service of the March 10, 2023 Second Amended Complaint against Petitioner which added the ‘626 patent to the case and was the first complaint alleging infringement of the ‘626 Patent. (Ex. 1010, p.5, Dkt. Entry 44 of docket sheet showing March 10, 2023 date of service with the amended complaint at Ex. 1010, pp.7-31). Thus, the Petition is not barred under 35 U.S.C. § 315(b).¹

¹ The “relation back” doctrine of the Federal Rules of Civil Procedure is not recognized by the PTAB since PTAB proceedings are not governed by the Federal Rules of Civil Procedure. *Google LLC v Sonos, Inc.*, IPR2021-01563, Paper 13, at 5 (PTAB April 12, 2022).

B. Challenge

Pursuant to 35 U.S.C. § 311 and 37 C.F.R. § 42.104(b), this Petition requests cancellation of claims 9 and 19 as obvious based on the following prior art references:

- PCT publication WO 2018/042348 (“Gowanlock 1 ”). Ex. 1003.
- Swivelpole Product Catalogue NEC V2-4. Printed March 2014² (“Swivelpole catalog”). Ex. 1004.
- U.S. Patent No. 9,316,390 (“Gowanlock 2”). Ex. 1058.
- Larson Electronics / Magnalight YouTube video (copyright 2004-2012) published April 18, 2012. Ex. 1006.³

² The publication date is shown at the bottom of Exhibit 1004 at page 5 of 28.

³ The PTAB and federal courts recognize that publicly available and disseminated videos, including videos available on YouTube, are “printed publications” and appropriate as a basis to institute an IPR. *MerchSource, LLC v. DODOCase VR, Inc.*, No. IPR2018-00494, 2018 WL 4043241, *8 (P.T.A.B. August 22, 2018) (YouTube video supported institution of IPR); *Cartessa Aesthetics, LLC v. Serendia, LLC*, No. IPR2022-00593 2022 WL 3337271 (P.T.A.B. August 12, 2022) (concurrence) (a video is a printed publication if it is publicly accessible; video at issue was accessible and

thus a printed publication, citing *Acco Brands Corp. v. Think Prods., Inc.*, 2015 WL 6232937, *7 (P.T.A.B. Oct. 21, 2015) (finding that “product video” published on website qualifies as “printed publication” (citing *In re Wyer*, 655 F.2d 221, 227 (CCPA 1981); Manual of Patent Examining Procedure (“MPEP”) § 2128 (9th ed.2014)); *LKQ Corporation v. GM Global Technology Operations LLC*, No. PGR2020-00054, 2020 WL 6065196 *15 (P.T.A.B. Oct. 13, 2020) (videos available on Wayback Machine and YouTube relied on by Petitioner); *DJI Technology, Inc. v. Remote Imaging Solutions, LLC*, No. IPR2020-00345, 2020 WL 3549114 *5 (P.T.A.B. June 30, 2020); *Intex Recreation Corp. v. Bestway Inflatables & Material Corp.*, 2017 WL 2312915, *10 (PTAB May 26, 2017) (holding challenged claims unpatentable as obvious “over the Intex Video and Blomquist”); *Ex Parte Mettke*, 2008 WL 4448201, *6 (P.T.A.B. Sept. 30, 2008) (finding “video tape” qualifies as “printed publication” under the statute because “the key ... is the ‘probability of dissemination’ rather than form”). *See also Suffolk Techs., LLC v. AOL Inc.*, 752 F.3d 1358, 1364 (Fed. Cir. 2014) (citation omitted) (whether a reference qualifies as a “printed publication” is a legal conclusion based on underlying factual determinations); *HVLPO2, LLC v. Oxygen Frog, LLC*, Slip Copy 2018 WL 11413543 (N.D. Fl. May 28, 2018) (YouTube video was a “printed publication”); *Apple, Inc. v. Samsung Electronics Co., Ltd.*, 877 F.Supp.2d

The statutory grounds are:

Ground	35 U.S.C.	Claims	References
1	§ 103	9 and 19	WO 2018/042348 (“Gowanlock 1”) in view of Swivelpole catalog
2	§ 103	9 and 19	US 9,316.390 (“Gowanlock 2”) in view of Swivelpole catalog
3	§ 103	9 and 19	WO 2018/042348 (“Gowanlock 1”) or US 9,316.390 (“Gowanlock 2”) in view of Larson Electronics / Magnalight YouTube video https://www.youtube.com/watch?v=EWXJeKNRs00

The record establishes a reasonable likelihood of prevailing on each ground.

III. Background

The ‘626 Patent issued on January 26, 2021 and is a continuation of application No. 16/138,723, filed on Sep. 21, 2018, now U.S. Pat. No. 10,473,282, which is a continuation-in- part of application No. 16/009,032, filed on Jun. 14, 2018, now U.S.

838 , 885-85 (N.D. Ca. July 1, 2012) rev’d on other grounds, 695 F.3d 1370 (Fed. Cir. 2012) (video was printed publication because it disseminated at conferences and was publicly accessible). As demonstrated by Ex. 1008, Declaration of Jake Hamdan, including at paragraphs 59 and 60, Exhibit 1006 Larson Electronics / Magnalight YouTube video (copyright 2004-2012) published April 18, 2012 and is a publicly accessible and disseminated video found by a search on YouTube.

Pat. No. 10,711,961, which also claims priority to U.S. Provisional Application No. 62/643,663, filed on March 15, 2018. Thus, the earliest possible effective filing date of the '626 Patent is March 15, 2018 and post-AIA law applies.⁴

A. The '626 Patent

The '626 Patent describes a plurality of light units attached to the handrail of a rig's crown deck. Each light unit has a mounting pole 240, a light fixture 248 having a light, and a bracket 242, 244 configured to attach the mounting pole to the drilling rig. Ex. 1001, Figs. 7A, 7B, and 8. Figure 8 below shows a light on a mounting pole with bracket 310 to attach the pole to the rail. Ex. 1001, Fig. 8.

⁴ Petitioner does not concede that the '626 Patent is entitled to the March 15, 2018 provisional filing date. However, the effective priority date is irrelevant to this IPR because all the prior art references in the asserted grounds of invalidity are prior to the provisional filing date.

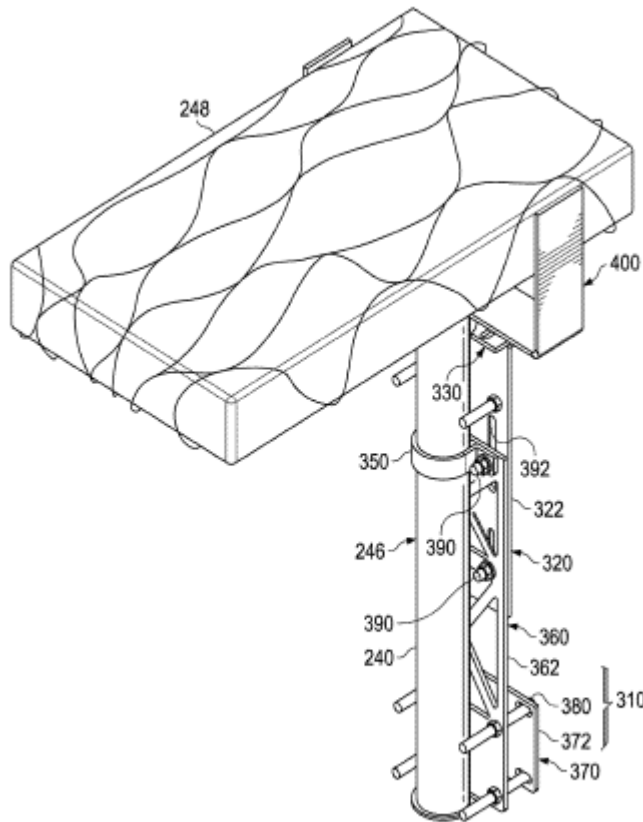


FIG. 8

FIG. 8 of the '626 Patent Ex. 1001, Fig. 8.

B. The Relevant Prosecution History of the '626 Patent

The '626 Patent was filed on September 16, 2019, as U.S. Patent Application No. 16/571,527. Ex. 1001, p.1 of 13.

The first office action was mailed November 25, 2020 and immediately allowed claims 21-33 and 35-39 without rejection. Allowed claim 21 became claim 9 of the '626 Patent which is challenged here. Allowed claim 31 became claim 19 of the '626 Patent which is challenged here. The November 25, 2020 office action did not shed

light on the reasons for allowing the claims as it simply recited the claim limitations and stated:

Regarding independent claim 21 [now 9], the references of the Prior Art of record fail to teach or suggest the combination of the limitations as set forth in claim 21, and specifically comprising the limitation wherein a rig comprising: a derrick; a crown deck at the top of the derrick, the crown deck comprising a handrail; and a plurality of light units attached to the handrail each light unit comprising: a mounting pole, wherein each light unit comprises a separate mounting pole, such that the system comprises a plurality of mounting poles; and a light fixture comprising one or more lights, the light fixture coupled to the mounting pole.

Regarding claims 22-30, claims 22-30 are allowable for the reasons given in claim 21 because of their dependency status from claim 21.

Regarding independent claim 31 [now 19], the references of the Prior Art of record fail to teach or suggest the combination of the limitations as set forth in claim 31, and specifically comprising the

limitation wherein a method for illuminating a wellsite, comprising:
mounting a plurality of mounting poles on a crown deck of a rig,
wherein each of the plurality of mounting poles is attached to a
handrail of the crown deck: mounting a plurality of lights to the
plurality of mounting poles, wherein each of the plurality of mounting
poles supports at least one of the plurality of lights, and each of the
plurality of lights is mounted to only one of the plurality of mounting
poles; and illuminating the wellsite using the plurality of lights.

Regarding claims 32-33, 35-39, claims 32-33, 35-39 are allowable for
the reasons given in claim 31 because of their dependency status from
claim 31.

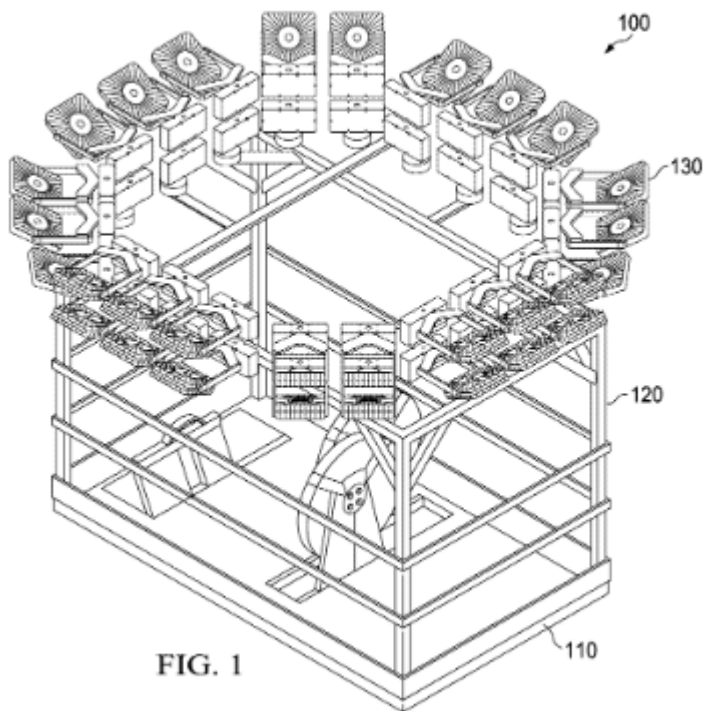
Ex. 1002, pp.34-35 of 336.

In addition to immediately allowing 21-33 and 35-39, the November 25, 2020
first office action only rejected claims 13-20 for a lack of antecedent basis. “The” was
changed to “a” in independent claim 13 (Ex. 1002, p.25 of 336) and a notice of
allowance was issued. Ex. 1002, pp.7-13 of 336.

It appears from the immediate allowance that the Examiner may have misapprehended the scope and nature of the prior art due to Figure 1 in the '626 Patent and the fact that the '626 Patent characterized the prior art in the Background as:

fixed, monolithic structures that are typically crown or frame systems, with a single size and layout accommodating one type of light and rig. Because they are a single structural unit, they are heavy and typically require cranes along with multiple workers for installation, removal, and adjustments.

Ex. 1001, 1:24-28.



The ‘626 Patent passage cited above overstated the problem purportedly addressed by the claimed patent because the prior art available to a POSITA includes much more than “fixed, monolithic structures that are typically crown or frame systems.” That is, the prior art available to a POSITA included lighting components useful for elevated structures like rigs such as, for example, those in the references applied here. Those references describe, for example, lights on poles with brackets that were commonly attached to a handrail or fence-like structures in the oil and gas industry. The motivation for a POSITA to use these other known available components was stated expressly in the Background of the ‘626 Patent which explained the need for lighter, easier to install, and safer lighting than the monolithic structure. Ex. 1001, 1:24-28.

During prosecution of the ‘626 Patent the other available prior art such as that described in the instant Petition was not applied by the Examiner. Nor was the other available prior art such as that described in the instant Petition distinguished by the Patent Owner of Record. Accordingly, there is no overlap between the arguments made during examination and the manner in which the Petition relies on and presents the prior art so the Petition should not be denied on the basis of 35 U.S.C. § 325(d).

IV. Expert Testimony, Level of Skill in the Art, Claim Construction

A. Declaration Evidence

This Petition is supported by the declaration of Jake Hamdan. Ex. 1008.

B. Level of Skill in the Art

The '626 Patent describes lighting systems for drilling rigs. Ex. 1001, abstract. A person of ordinary skill in the art ("POSITA") would have had at least a bachelor's degree in petroleum engineering, mechanical engineering, civil engineering, construction, architecture, or a similar degree with a year or more experience working on or around rigs, such as a drilling rig, where one or more lighting systems were used to illuminate the wellsite. Ex. 1008, ¶¶39-40. Additional practical experience would substitute for lack of a formal degree. *Id.*, ¶41.⁵

C. Claim Construction

The claim terms of the '626 Patent are construed under *Phillips*, considering the plain meaning of the claim terms to a POSITA.⁶ While it is currently believed

⁵ Two different experts for Patent Owner of Record had a similar POSITA definition in related cases. Ex. 1054, pp.2-3 of 4. Ex. 1055, p.3 of 5.

⁶ Petitioner neither concedes each claim satisfies all statutory requirements, such as

that no terms need to be expressly construed for purposes of this IPR because the plain and ordinary meaning applies, the following claim constructions are employed as the plain and ordinary meaning has been agreed to by the ‘626 Patent Owner of Record. Ex. 1056, JOINT CLAIM CONSTRUCTION CHART

<u>Claim Term</u>	<u>Patent Claim(s)</u>	<u>Agreed Construction</u>
crown deck	’626 Patent claims 9 and 19	a collection of structures within the crown that includes a walking surface, parts supporting the walking surface, and any associated handrail
attached	’626 Patent claims 9 and 19	Plain and ordinary meaning, which includes direct and indirect attachment, connection, and coupling.
handrail ⁷	’626 Patent claims 9 and 19	Plain and ordinary meaning

§§ 101 and 112, nor waives any argument concerning claim scope or grounds that can only be raised in district court.

⁷ The term “handrail” nowhere appears in the specification as only “rail” is mentioned. Petitioner has not taken a position that “handrail” is indefinite in the district court case.

Petitioner and Patent Owner of Record dispute the proper construction of “mounting pole”. The parties original positions are outlined below. Ex. 1057, Petitioner Ensign U.S. Markman brief and exhibits. Petitioner’s proposed construction was adopted in a previous case.⁸

<u>Claim Term</u>	<u>Petitioner’s proposed construction</u>	<u>Patent Owner’s proposed construction</u>
mounting pole	“A pole used for mounting something. Both “mounting” and “pole” have their plain and ordinary meanings.” A pole can be cut shorter and still remain a pole, even if its length no longer far exceeds the width.	“elongated structure fixed at one end and for mounting where the length of the structure far exceeds the width”

A Markman hearing was held October 2, 2023 in the district court case. Petitioner suggested there that the Court adopt Patent Owner’s proposed construction without the indefinite and ambiguous words “elongated” and “far”. “Elongated” and “far” do not appear in either asserted patent and are words of degree where the specification does not provide any standard of measuring the degree. Ex. 1059, Ensign U.S. Markman slides. Thus, Petitioner proposed the modified construction

⁸ A prior lawsuit involving the child ‘016 Patent and a party other than Petitioner adopted Petitioner’s proposed construction. Ex. 1009, pp.17-18 of 19.

“~~elongated~~ structure fixed at one end and for mounting where the length of the structure ~~far~~ exceeds the width”. Ex. 1058, Ensign U.S. Markman slides. The Court took the issue under advisement. However, the PTAB does not need to construe “mounting pole” because claims 9 and 19 are obvious over the prior art presented here whether the Petitioner’s, Patent Owner’s, or the modified Patent Owner’s construction of “mounting pole” is adopted.⁹

V. Prior Art

Since there were no prior art rejections, none of the prior art relied upon in the Petition was employed in any rejection in the ‘626 file history.¹⁰

⁹ The Swivelpole catalog and the Larson Electronics / Magnalight YouTube video each show a pole for mounting. The pole appears to be an “elongated structure fixed at one end and for mounting where the length of the structure far exceeds the width”. Thus, the prior art mounting poles meet all the constructions. Ex. 1008, ¶20, fn.1.

¹⁰ U.S. 9,316,390 (“Gowanlock 2”) and Pages 5-9 of the Swivelpole catalog appear on the face of the ‘626 Patent. Ex. 1001, p.1 of 13. CA3034206 listed on the face of the ‘626 Patent is a Canadian counterpart of PCT Publication WO 2018/042348 (“Gowanlock 1”). Ex. 1001, p.1 of 13.

A. PCT Publication WO 2018/042348 (“Gowanlock 1”)

Gowanlock 1 was filed August 30, 2017 claiming priority to an August 30, 2016 provisional. Ex. 1003. Gowanlock 1 published on March 8, 2018 and is prior art under at least post-AIA 35 U.S.C. §102(a)(1). Ex. 1003.

Gowanlock 1 describes a drilling rig “including a derrick or mast and crown, having a drilling site lighting system attached thereto, comprising at least one light fixture attached directly to the crown on each of at least two sides, wherein the light fixture contains a fixed or removable light fixture attachment connecting the light fixture to the crown.” Ex. 1003, paragraph [0008]. Annotated Figure 1 of Gowanlock 1 shown below depicts a modular lighting system mounted on a rig with a crown deck and associated handrail. Ex. 1003, p.10 of 16, Figure 1A annotated.

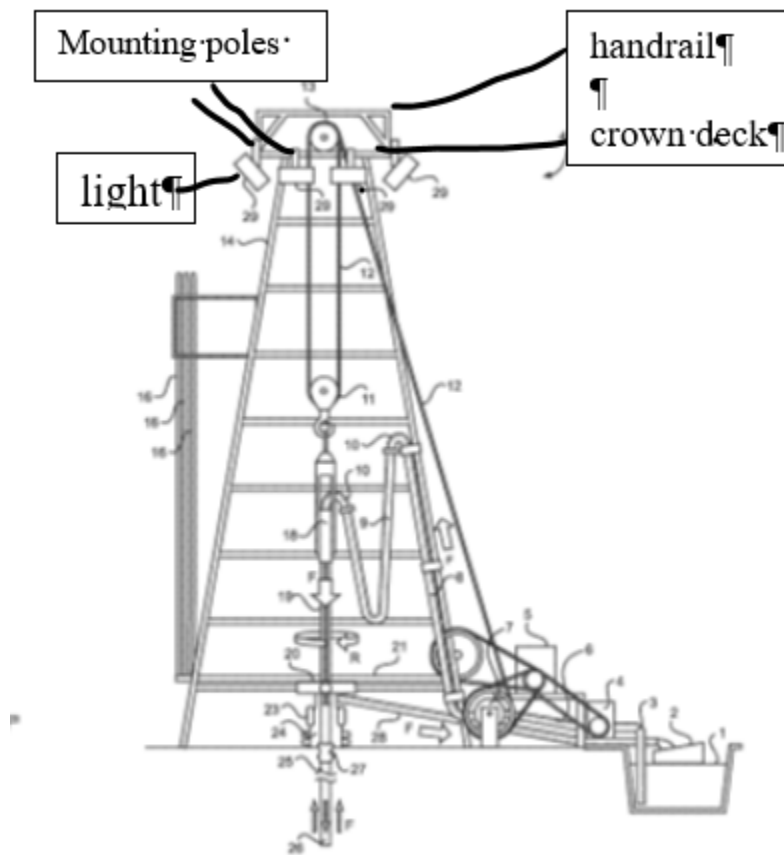
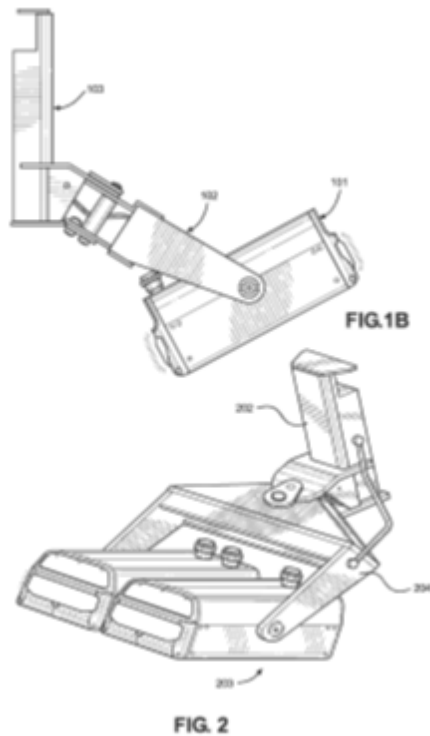


FIG. 1A

Annotated Figure 1A of Gowanlock 1.

Gowanlock 1 discloses a short mounting pole and that each light unit comprises a separate short mounting pole such that the system comprises a plurality of mounting poles each of which mounting poles it describes as a “light fixture attachment (103 and 202) in paragraph [0019]. Ex. 1003, p.6 and pp. 10-11 of 16, Fig. 1A, 1B, and 2; Ex. 1008, ¶¶70-71 and ¶80 (with chart). As shown in Annotated Figure 1A a crown deck

13 with a handrail is at the top of the derrick.¹¹ A plurality of lights are attached to the crown deck at the top of the derrick. Each light is separately attached using a pole as shown in Annotated Figure 1A above and Figure 1B and Figure 2 below. Ex. 1003, pp.10-11 of 16, Figures 1A, 1B, and 2.¹²



¹¹ Gowanlock 1 refers to 13 as a “crown block” which based on the specification and Figure 1A a POSITA would understand includes a crown deck and a handrail. Ex. 1008, ¶70.

¹² 103 and 202 are referred to as a “light fixture attachment” and a POSITA would understand them to be a “mounting pole” as that term is used in the ‘626 Patent even under the C&M proposed claim construction. Ex. 1008, ¶70.

B. U.S. Patent No. 9,316,390 (“Gowanlock 2”)

Gowanlock 2 was filed November 29, 2013. Ex. 1058. Gowanlock 2 first published on June 4, 2015, issued as a patent on April 19, 2016, and is prior art under at least post-AIA 35 U.S.C. § 102(a)(1). Ex. 1058.

Figure 1 of Gowanlock 2 is shown below. As stated in Gowanlock 2:

“Crown 100 includes a base 105 and an outer frame structure 110 including vertical 115 and horizontal 120 frame members arranged to extend from the base 105 such that the base 105 provides an internal floor to the crown 100.” Ex. 1058, 4:49-53.

Thus, just as in Gowanlock 1, in Gowanlock 2 there is a crown deck and an associated handrail. That is, the crown deck is 105 while the upper horizontal frame member 120 is the crown deck’s associated handrail as indicated in the annotated figure below.¹³

¹³ Ex. 1008, ¶73.

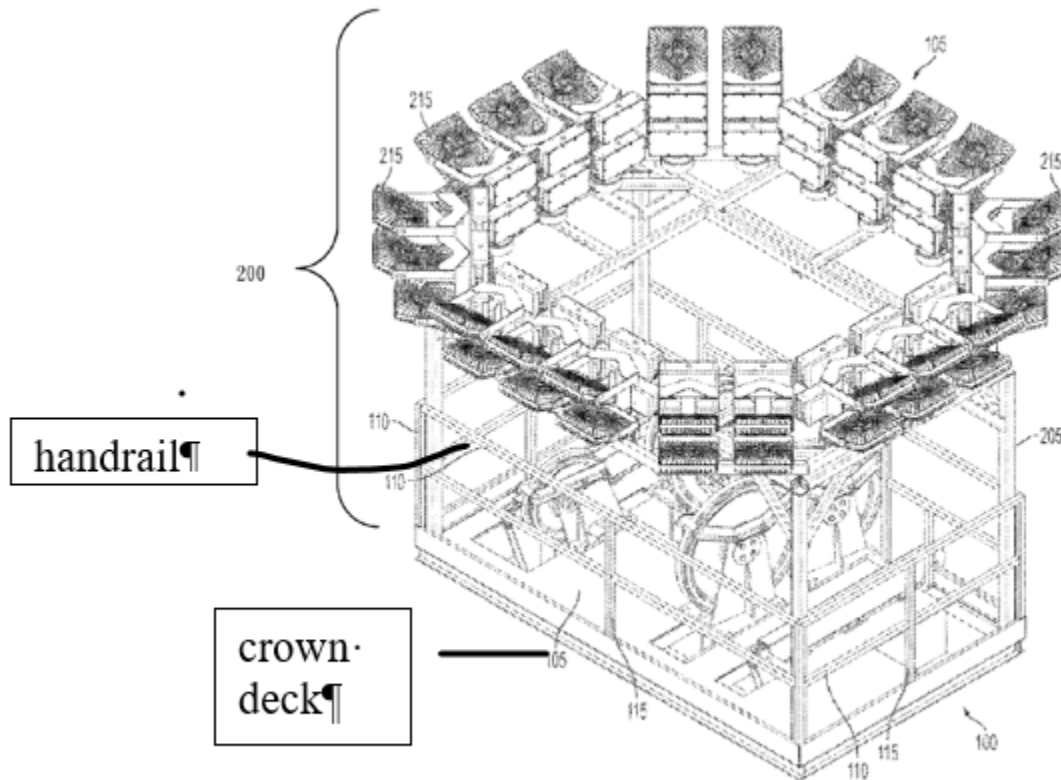


FIG. 1

Gowanlock 2 Annotated Figure

As Gowanlock 2 describes, a lighting frame 205 includes a

“plurality of light support posts 210 arranged around a perimeter of the lighting frame and extending vertically such that one or more light fixtures 215 ,215a and 215b may be connected to each light support post 210. The plurality of light fixtures 215 arranged and separated vertically from each other by their positioning on the light support posts 210 permits for light to be directed in a predetermined region proximate

the crown 100 and at a predetermined region encompassing a ground area surrounding the drill rig. That is, one group of lights may be directed towards particular equipment on the drilling rig, while another group may be directed to an area surrounding the drilling rig to provide maximum lighting for personnel working in or around the drilling rig.”

Ex. 1058, 4:63-5:10.

C. Swivelpole Product Catalogue NEC V2-4. Printed March 2014 (“Swivelpole catalog”)

The Swivelpole catalog was printed in March 2014. Ex. 1004. The Swivelpole catalog is prior art under at least post-AIA 35 U.S.C. § 102(a)(1). For reasons not explained in the file history the examiner was only provided with pages 5-9 of the Swivelpole catalog and not provided with the other 23 pages. Ex. 1001, p.1 of 13 (citing pages 5-9 on the front of the ‘626 Patent.)

The Swivelpole catalog expressly notes that it is useful in the oil and gas industry as shown below. Ex. 1004, p.28 of 28.

Join industry leaders worldwide and specify **Swivelpole™**

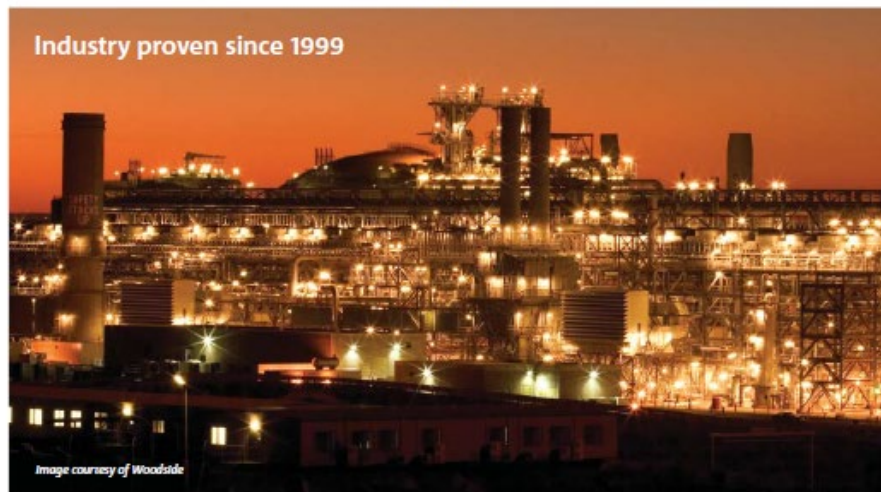
Oil & Gas | Mining & Metal | Power Generation
Heavy Engineering | Water & Waste | Infrastructure

Design Firms

ABB	KBR
Aker	KJV
AMEC	Lycopodium
Aurecon	Minerva
Ausenco	Mustang Engineering
Bechtel	Onyx
Black & Veatch	Salpem
Calibre	Sedgman
CBI	Shaw Group
Fluor	Sinclair Knight Merz
Foster Wheeler	SNC Lavalin
Fyfe	Technip
Hatch Group	Udhe Shedden
Jacobs Engineering	Worley Parsons

End Users

Alcoa	Marathon Oil
Apache	MEG Energy
BHP Billiton	Mosaic
BP	Neptune Terminals
Caltex	Nickel West
Canexus	Orica
Cenovus Energy	Origin Energy
Chevron	Osum
Clough	Potash Corp
Conoco Phillips	Rio Tinto
CSBP	Sandvik
Dow Chemical	Sasol
Exxon Mobil	Shell
FMG	Suncor
Highland Valley Copper	Synchrude
Imperial Oil	Woodside
Inltec Pivot	Xstrata
Lafarge	



Ex. 1004, p.28 of 28.

The Swivelpole catalog notes that it may be mounted in many different configurations including to handrails which it refers to as “guardrails”. Ex. 1004, p.8 of 28. As shown in the Swivelpole catalog, mounting configurations are shown that, of course, include mounting poles and attachment mechanisms such as brackets, and bolts. See, for

Petition for *Inter Partes* Review
U.S. Patent No. 10,900,626

example, Ex. 1004, p.15 of 28 reproduced below showing a light attached to a mounting pole attached to a handrail. Since Patent Owner agrees that “attached” in the claims includes both “direct” and “indirect” attachment, it is not relevant which pole in the Swivelpole catalog photos below is considered the claimed mounting pole.

Ex. 1008, ¶77.



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The Swivelpole catalog further states:

Swivelpole™ solves all your lighting maintenance and upgrade problems in one smart move. It's unique, globally patented swivel mechanism lets you lower – and rotate – a light fitting to a safe working level in minutes. No ladders, no scaffolding, and no fall arrest systems.

Swivelpole™ can be built-in to new facilities, or easily retrofitted without welding so there's no need for hot work permits. And once fitted, you can change – or upgrade – to new lighting technology. To operate, all you need is a socket wrench. Ex. 1004, p.2 of 28.

D. Larson Electronics / Magnalight YouTube video at <https://www.youtube.com/watch?v=EWXJeKNRs00> (copyright 2004-2012) (Ex. 1006)

Larson Electronics was a known provider of oil and gas drilling rig lighting equipment prior to the earliest potential filing date of the '626 Patent. Ex. 1005 and Ex. 1008, ¶79. The Larson Electronics YouTube video at Exhibit 1006 demonstrates how easily one may attach a light on a pole to a handrail (such as one that may be surrounding a rig's crown deck) using a simple bracket and bolt. Ex. 1008, ¶79. The below still photos from the video illustrate the two simple steps.





As stated in the April 18, 2012 comments below the video:

500 watt 120 Volt quartz light with aluminum scaffold mount covers 3,300 square feet. The adjustable aluminum mount can be attached to ladders, ship rails, hand rails, catwalks and scaffolding to facilitate convenient placement of this 12 volt work light. The aluminum rail mount is adjustable from 26 inches to 43 inches to accommodate the spacing between all types of rails. The operator

can position the angle of the light both vertically and horizontally a "yolk" enabling the operator to position this explosion proof light at any angle to adequately cover the work area. The rail mount also offers the ability to elevate the light to different heights. Since many handrails are located at waist height, the rail offers the operator the ability to elevate the light when necessary.

See Ex. 1006-1 (screenshot of YouTube video page).

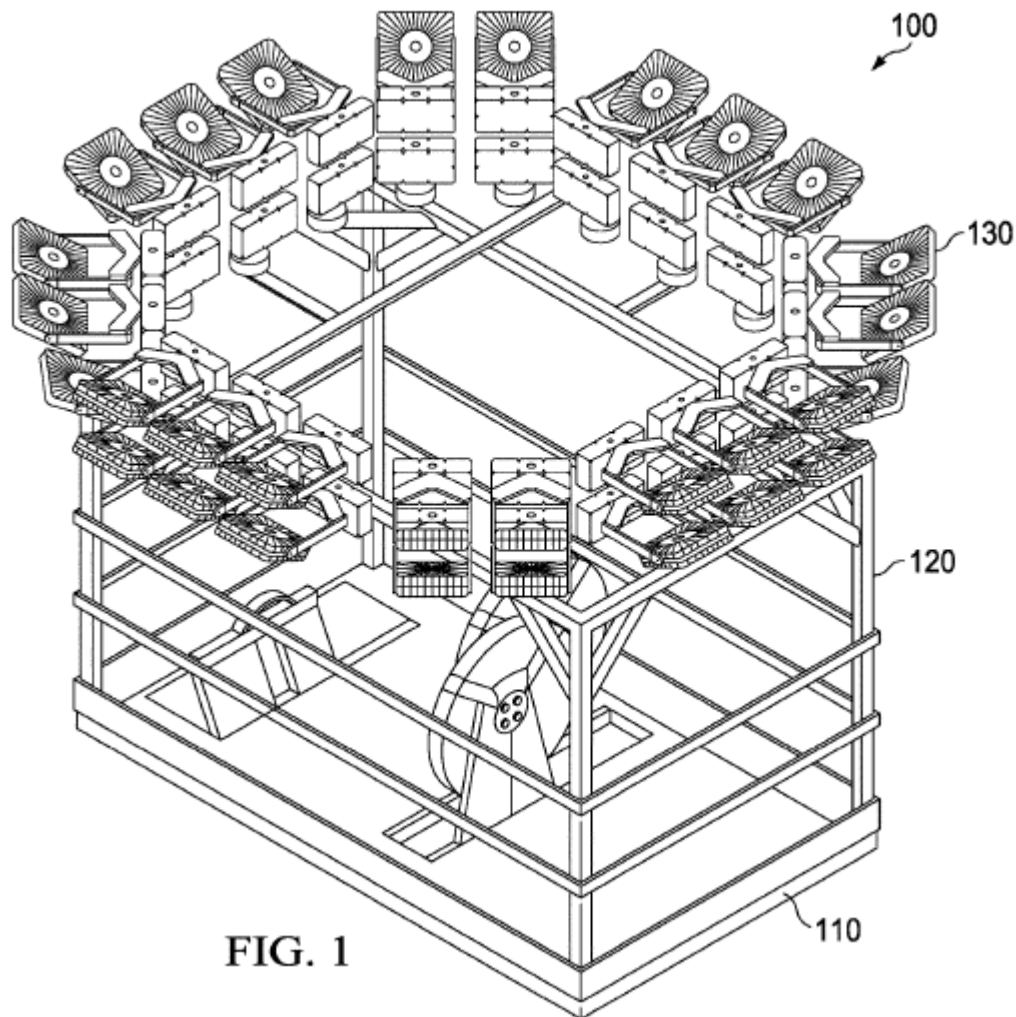
E. The Motivations to Modify the Prior Art As Described in this Petition Are Expressly Found in the ‘626 Patent Background¹⁴

The ‘626 Patent admits in the Background that “To ensure even and effective lighting of the well site, lighting systems have previously been installed on the uppermost portion of the drilling rig, also referred to as the “crown” of the rig.” Ex. 1001, 1:14-17. Further, the Background describes issues with one specific prior art example of a crown-mounted lighting system known by a POSITA prior to the time of the filing of the ‘626 Patent that are “... fixed, monolithic structures that are

¹⁴A statement by an applicant in the specification identifying the work of another as “prior art” is an admission which can be relied upon for both anticipation and obviousness determinations. *Riverwood Int’l Corp. v. R.A. Jones & Co.*, 324 F.3d 1346, 1354 (Fed. Cir. 2003); *Constant v. Advanced Micro-Devices Inc.*, 848 F.2d 1560, 1570 (Fed. Cir. 1988).

typically crown or frame systems, with a single size and layout accommodating one type of light and rig. Because they are a single structural unit, they are heavy and typically require cranes along with multiple workers for installation, removal, and adjustments. A typical rig lighting frame system may require between 6 and 12 hours for installation. Further, before a derrick can be moved, the lighting systems must be removed—again with all of the necessary equipment and personnel—and a similar amount of time may be required for uninstallation. These installation and uninstallation times extend the time needed between rig deployments. Due to the high cost of operating a rig, any such delay is extremely inefficient for the operator of a wellsite. These factors also increase the time required to be spent on maintaining these systems, which also increases safety risk.” Ex. 1001, 1:23-29.

The prior art Figure 1 below from the ‘626 Patent shows lights on a monolithic structure attached to an associated handrail of a crown deck of a drilling rig such that the ground around the drilling rig is illuminated when in use. Ex. 1001, Fig. 1 and 2:26-28.



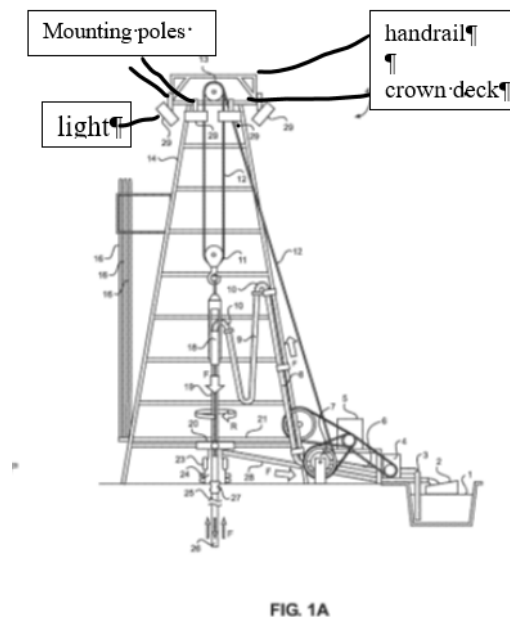
VI. Motivation to Combine

A. Gowanlock 1 and Swivelpole catalog

A POSITA would be motivated to combine Gowanlock 1 and Swivelpole catalog for at least the reasons stated in the accompanying declaration at Exhibit 1008, paragraphs 81-87 reproduced below.

81. For at least the reasons here, a POSITA would readily know to

employ the mounting poles with associated lights which are shown attached to a handrail in the Swivelpole catalog and attach the mounting poles with associated lights on the handrail instead of the side of Gowanlock 1's floor of the crown deck. This combination would obtain claims 9 and 19.



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82. The Swivelpole catalog shows that its mounting poles may be readily attached to handrails, i.e., guardrails, and that its separately attached mounting poles and lights are useful in the oil and gas industry.



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A POSITA knows that handrails have long surrounded crown decks on derricks for safety. Exs. 1012, 1013. This is shown in Gowanlock 1 figure 1A. Ex. 1003. Thus, a POSITA would combine the references for the obvious and predictable result of placing or improving modular lighting on a railing associated with a crown deck of a rig. That is, a POSITA would readily attach the lights and associated mounting poles shown in Swivelpole to an associated handrail of a crown deck as shown in Gowanlock 1 because the Swivelpole pole, which swivels from a point on the pole, would make the lights more accessible and easier to adjust. In addition, the use of Swivelpole mounting poles with

brackets and bolts allows mounting or affixing the lights to different configurations of handrails on crown decks.

83. The Swivelpole mounting pole lights were well-known to the oil and gas industry. The Swivelpole catalog expressly notes that it is useful in the oil and gas industry and notes that it may be mounted in many different configurations including to handrails which it refers to as “guardrails”. Ex. 1004, p.8 of 28. In sum, the POSITA would combine the two references and be motivated to do so because the implementation of the combination is (1) a simple combination of known elements to obtain predictable results, i.e., separately attached pole mounted lights attached to an associated handrail of a crown deck; (2) simple substitution of one known element (the Swivelpole catalog lights and associated poles) for another (Gowanlock 1’s crown deck mounted lights) to obtain predictable results; (3) the Swivelpole products, which swivel to allow installation, adjustment, and maintenance of the light fixtures, provide functionality and flexibility to the rig lighting envisaged by Gowanlock 1; (4) the combination addresses the known problems (admitted in the Background of the ‘626 patent) with certain types of rig lighting that were difficult to install and

adjust; and (5) the use of known techniques (attaching poles with lights to an associated handrail of a crown deck) to improve similar devices in the same way.

84. A POSITA would have reasonably expected to succeed because lights with mounting poles have been attached to many items such as guardrails for years using tools available in most hardware stores and commonly fabricated in oil field equipment fabrication shops and rig upyards.

85. For example, a light fixture or other items are commonly attached to a handrail via a pole, a bracket, and/or one or more screws or bolts. Ex. 1013.



86. Poles have been attached to crown deck handrail with flag, airplane lights, and other structures attached. Ex. 1013.



87. There are only a finite number of ways and places to attach lights to a crown deck or a surrounding handrail. As described above, the POSITA had good reasons to pursue the known options in the

Swivelpole catalog using ordinary skill and common sense to arrive at

Claims 9 and 19 of the '626 Patent. Claims 9 and 19 are obvious.

Id., ¶¶81-87.¹⁵

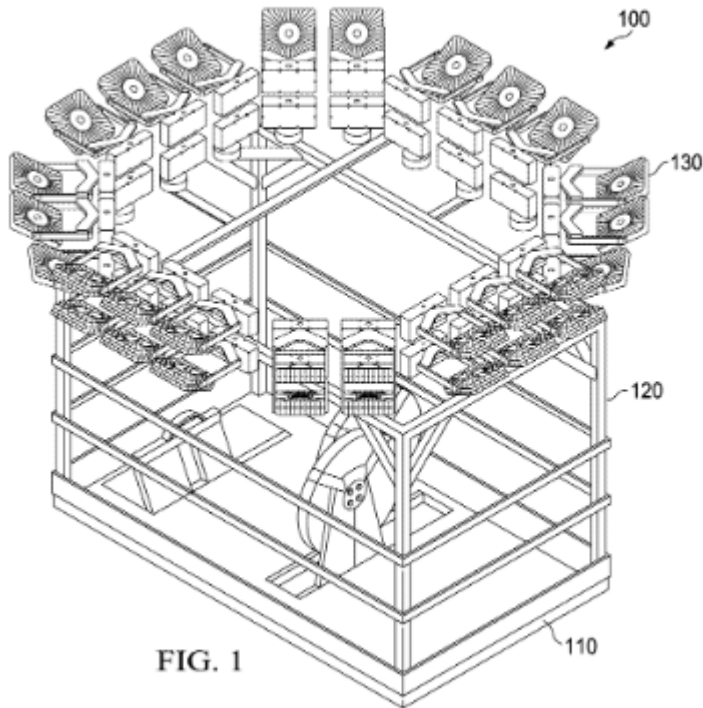
B. Gowanlock 2 and Swivelpole catalog

A POSITA would be motivated to combine Gowanlock 2 and Swivelpole catalog and obtain claims 9 and 19 of the '626 Patent for at least the reasons stated in the accompanying declaration at Exhibit 1008, paragraphs 89-96 reproduced below.

89. As described above, the '626 Patent Owner of Record admitted that before the filing date it was known that, "To ensure even and effective lighting of the well site, lighting systems have previously been installed on the uppermost portion of the drilling rig, also referred to as the "crown" of the rig." Ex. 1001, 1:14-17. It was also known that the prior art Figure 1 in the '626 Patent should be modified to make the plurality of lights less heavy, easier to install, easier to uninstall, easier to adjust, and safer as stated in the '626 Patent. Ex. 1001, 1:23-29. That is, the Patent Owner admitted that a POSITA knew that

¹⁵ What's more, as described in the Swivelpole catalog its lighting solutions can reduce engineering cost, installation cost, labor cost, equipment cost, and potential injuries which are all independent motivations to employ its lighting solutions or variations thereof on a crown deck or its surrounding guardrail. Ex. 1004, p.2 of 28.

it would be advantageous to modify the below lighting arrangement which is Figure 1 of the '626 Patent.



90. Gowanlock 2 teaches a similar lighting arrangement to Figure 1 of the '626 Patent. That is, Gowanlock 2 teaches a lighting frame 205 includes a “plurality of light support posts 210 arranged around a perimeter of the lighting frame and extending vertically such that one or more light fixtures 215 ,215a

and 215b may be connected to each light support post 210.” Ex. 1058, 4:63-5:10.

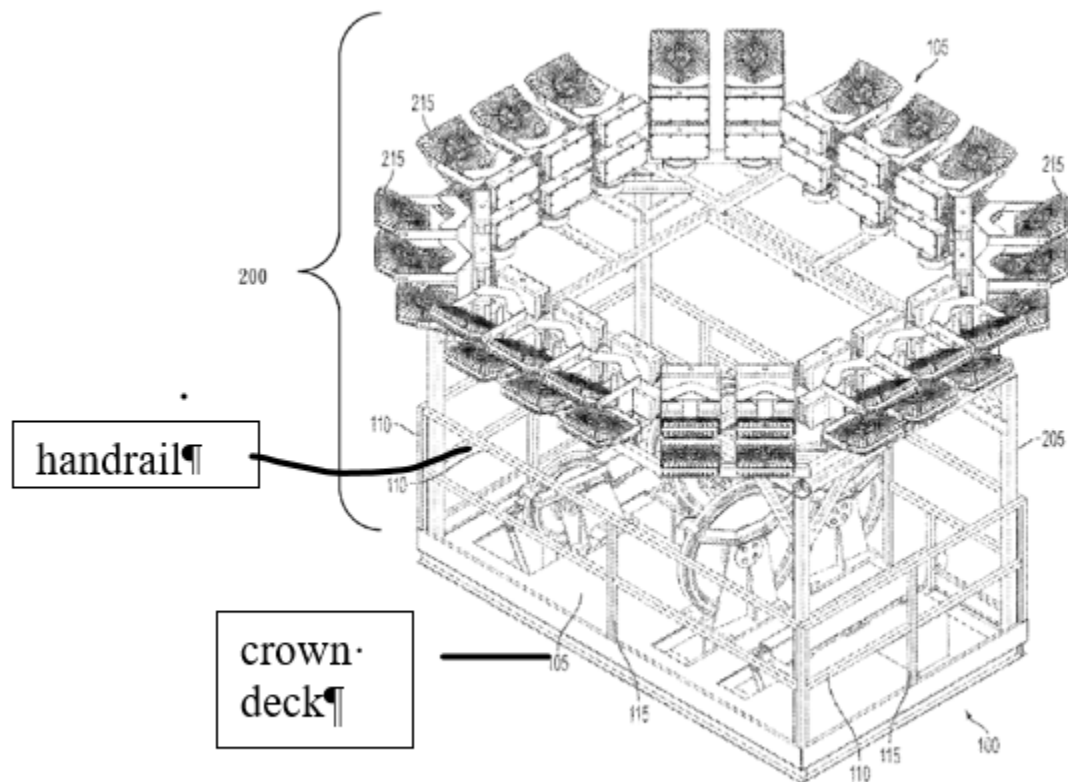


FIG. 1

A POSITA seeking to make lights in Fig. 1 of the '626 Patent or Figure 1A of Gowanlock 2 less heavy, easier to install, easier to uninstall, and safer would readily use the Swivelpole catalog to obtain claims 9 and 19.

91. A POSITA would readily know to employ the lights, mounting poles, and brackets shown in the Swivelpole catalog to separately attach a plurality of light units to a handrail, i.e., guard rail, around the crown deck. A POSITA also

knows that handrails have long surrounded crown decks for safety. Ex. 1012, 1013. This is shown in Figure 1 of Gowanlock 2 above.

92. The Swivelpole catalog shows that its mounting pole may be readily attached to handrails, i.e., guardrails, and that its separately attached mounting poles and lights are useful in the oil and gas industry.



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Thus, a POSITA would combine Gowanlock 2 and the Swivelpole catalog for the obvious and predictable result of placing or improving modular lighting on a crown deck of a rig to make a plurality of lights less heavy, easier to install, easier to uninstall, easier to adjust, safer to install, and safer to access for maintenance safer, each of which is an obvious motivating factor. Further, a POSITA would readily attach lights to a mounting pole on a crown deck and/or handrail and be motivated to do so because its swivel features would make the lights more accessible and easier to adjust. In addition, the use of mounting poles with brackets and

bolts allows mounting or affixing the lights to differently configured or designed handrails on crown decks.

93. The Swivelpole mounting pole lights were well-known to the oil and gas industry. The Swivelpole catalog expressly notes that it is useful in the oil and gas industry and notes that it may be mounted in many different configurations including to handrails which it refers to as “guardrails”. Ex. 1004, p.8 of 28. In sum, the POSITA would separately attach a number of the mounted pole lights in the Swivelpole catalog to a handrail of a crown deck as in claims 9 and 19 because the implementation is (1) a simple combination of known elements to obtain predictable results, i.e., separately attached pole mounted lights with brackets attached to a crown deck or a handrail around a crown deck; (2) simple substitution of one known element (a plurality of the Swivelpole catalog lights attached to the handrail) for another (prior art Figure 1 frame lights attached to the crown deck) to obtain predictable results; (3) the Swivelpole products which move to allow installation, adjustment, and maintenance of the light fixtures, provide functionality and flexibility to the rig lighting; and (4) the use of known techniques (attaching lights with brackets and poles to a handrail around a crown deck) to improve similar devices in the same way. A POSITA would have reasonably expected to succeed because lights with mounting poles attached

with brackets have been attached to many items such as guardrails for years using tools available in most hardware stores and commonly fabricated in oil field equipment fabrication shops and rig upyards.

94. For example, a light fixture or other items are commonly attached to a handrail via a pole, a bracket, and/or one or more screws or bolts.



95. Poles have been attached to crown deck handrail with flag, airplane lights, and other structures attached.



96. There are only a finite number of ways and places to attach lights to a crown deck or a surrounding handrail. As described above, the POSITA had good reasons to pursue the known options in the Swivelpole catalog and attach its pole mounted lights to the handrail of a crown deck in Gowanlock 2 instead

of the heavy frame light system using ordinary skill and common sense to arrive at Claims 9 and 19 of the '626 Patent.

Id., ¶¶89-96.¹⁶

C. Gowanlock 1 or Gowanlock 2 with Larson Electronics / Magnalight YouTube video at

<https://www.youtube.com/watch?v=EWXJeKNRs00>

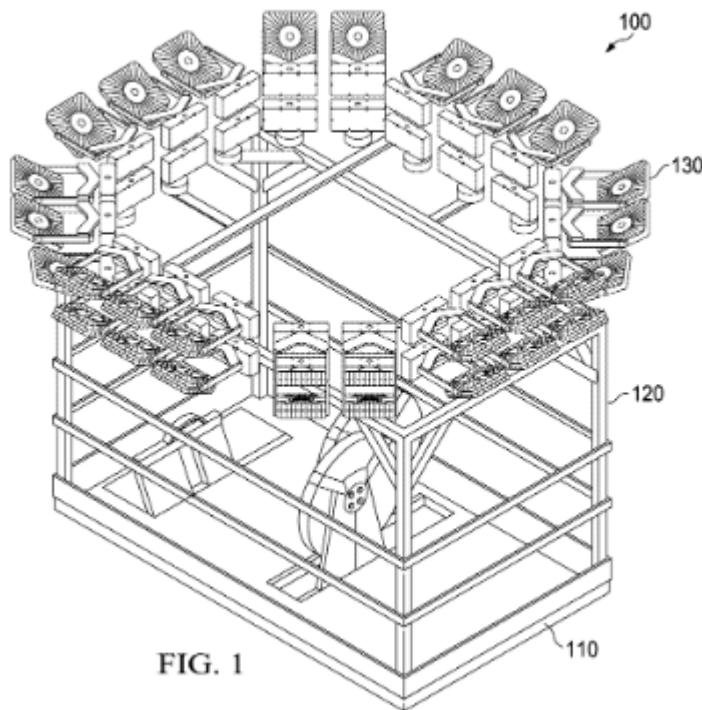
A POSITA would be motivated to combine Gowanlock 1 or Gowanlock 2 and the rail mount light, pole, and bracket shown in the Larson Electronics / Magnalight YouTube video and obtain claims 9 and 19 of the '626 Patent for at least the reasons stated in the accompanying declaration at Exhibit 1008, paragraphs 98-106 reproduced below.

98. As described above, the '626 Patent Owner of Record admitted that before the filing date it was known that, "To ensure even and effective lighting of the well site, lighting systems have previously been installed on the uppermost portion of the drilling rig, also referred to as the "crown" of the rig."

Ex. 1001, 1:14-17. It was also known that the prior art Figure 1 in the '626

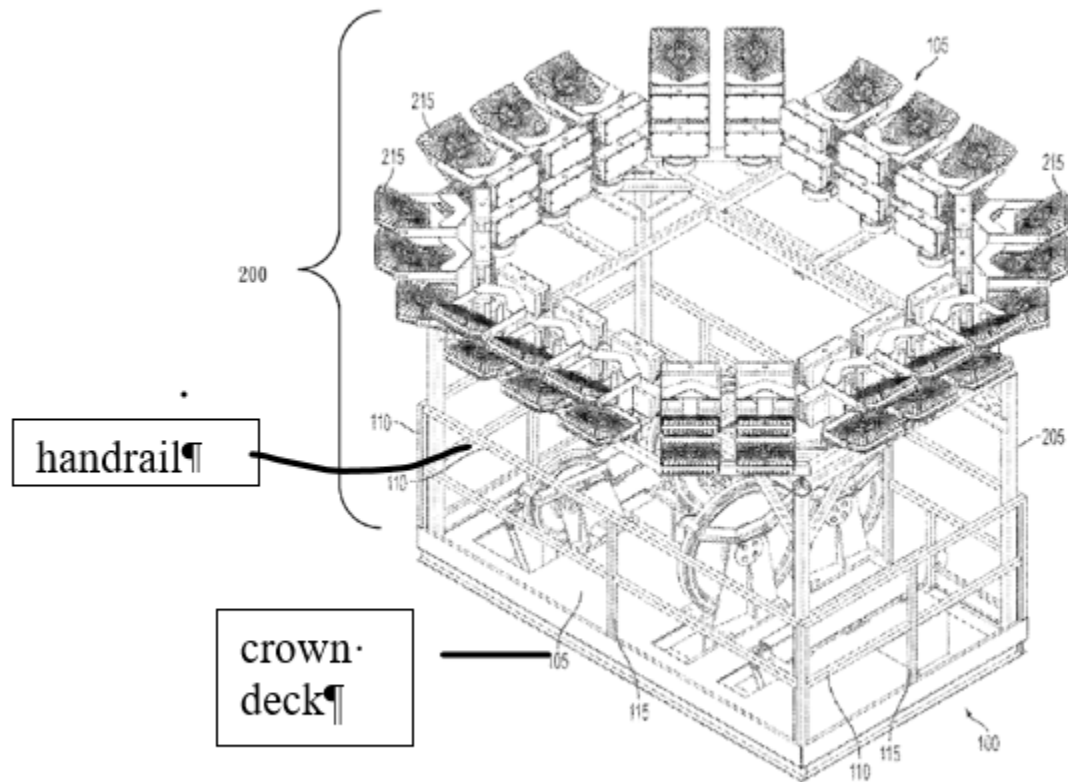
¹⁶ What's more, as described in the Swivelpole catalog its lighting solutions can reduce engineering cost, installation cost, labor cost, equipment cost, and potential injuries which are all independent motivations to employ its lighting solutions or variations thereof. Ex. 1004, p.2 of 28.

Patent should be modified to make the plurality of lights less heavy, easier to install, easier to uninstall, easier to adjust, and safer as stated in the '626 Patent. Ex. 1001, 1:23-29. That is, the Patent Owner admitted that a POSITA knew that it would be advantageous to modify the below lighting arrangement which is Figure 1 of the '626 Patent.



99. Gowanlock 2 teaches a similar lighting arrangement to Figure 1 of the '626 Patent. That is, Gowanlock 2 teaches a lighting frame 205 includes a “plurality of light support posts 210 arranged around a perimeter of the lighting frame and extending vertically such that one or more light fixtures 215 ,215a

and 215b may be connected to each light support post 210.” Ex. 1058, 4:63-5:10.



100. Gowanlock 1 like Gowanlock 2 teaches lights attached to a crown deck.

That is, annotated Figure 1 of Gowanlock 1 shown below depicts a modular

lighting system mounted on a rig with a crown deck and associated handrail.

Ex. 1003, p.10 of 16, Figure 1A annotated.

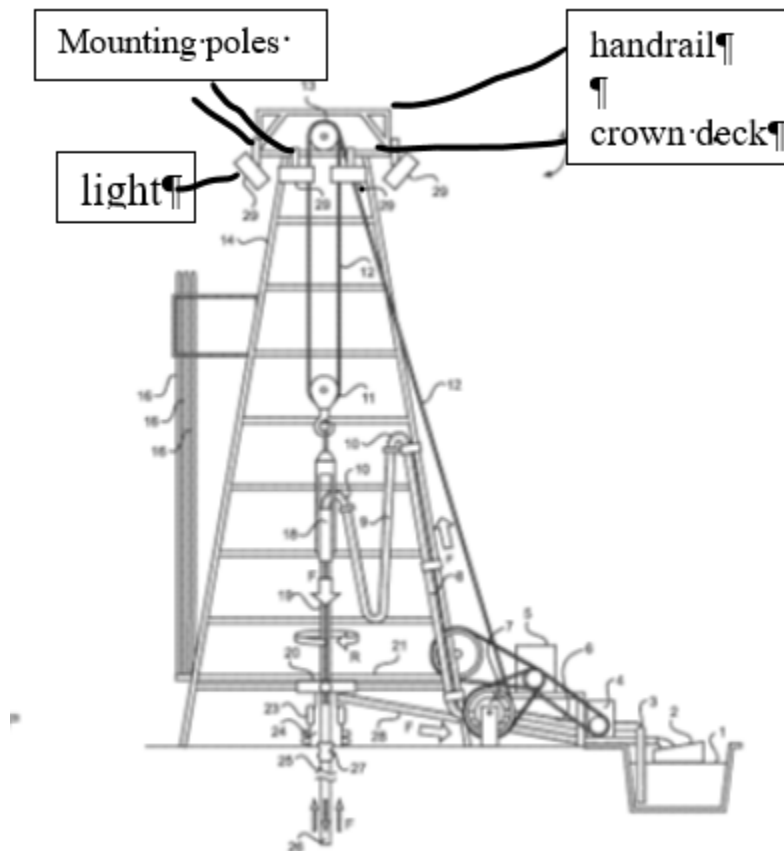


FIG. 1A

Annotated Figure 1A of Gowanlock

Therefore, a POSITA seeking to make lights that are in prior art Fig. 1 of the '626 Patent or Figure 1A of Gowanlock 2 less heavy, easier to install, easier to uninstall, and safer which were known goals admitted by the '626 Patent Owner would readily use the Larson Electronics / Magnalight YouTube video (Ex.

1006) to attach a light on a pole to a handrail surrounding a rig's crown deck using a bracket and obtain Claims 9 and 19.





101. That is, a POSITA would readily substitute the crown deck lighting in Gowanlock 1 or Gowanlock 2 with the lights, mounting poles, and brackets shown in Larson Electronics / Magnalight YouTube video to separately attach a plurality of light units to a handrail, i.e., guard rail, around the crown deck. A

POSITA also knows that handrails have long surrounded crown decks for safety. Exs. 1012,1013. This is also shown in Gowanlock 2.

102. Larson Electronics / Magnalight YouTube video shows that its lights on a mounting pole may be readily attached to handrails, i.e., guardrails. Indeed, the text accompanying the video on line states “The adjustable aluminum mount can be attached to ladders, ship rails, hand rails, catwalks and scaffolding to facilitate convenient placement of this 12 volt work light.” Thus, a POSITA would combine the references as suggested to use the Magnalight on the handrail instead of Gowanlock 1’s pole mounted lights near the internal floor or the crown or the heavy frame lights on Gowanlock 2 for the obvious and predictable result of placing or improving modular lighting on a crown deck of a rig to make a plurality of lights less heavy, easier to install, easier to uninstall, easier to adjust, safer to install, and safer to access for maintenance each of which is an obvious motivating factor. Further, a POSITA would readily attach lights to a mounting pole on a handrail and be motivated to do so because it would make the lights more accessible and easier to adjust.

103. In sum, the POSITA would separately attach a number of the mounted pole lights in Larson Electronics / Magnalight YouTube video to a handrail of a crown deck as in claims 9 and 19 because the implementation is (1) a simple

combination of known elements to obtain predictable results, i.e., separately attached pole mounted lights with brackets attached to a handrail around a crown deck; (2) simple substitution of one known element (a plurality of Magnalight YouTube video pole mounted lights attached to the crown deck handrail) for another (Gowanlock 1's pole mounted lights near the internal floor of the crown or prior art Figure 1 and Gowanlock 2 frame lights attached to the crown deck) to obtain predictable results; (3) the Larson Electronics / Magnalight YouTube video is readily available for purchase without any apparent patent licensing issues or can be assembled by a POSITA using components (metal bars, bolts, nuts, and hooks) that are also readily available or could be constructed; and (4) the use of known techniques (attaching lights with brackets and poles to a handrail around a crown deck) to improve similar devices in the same way. A POSITA would have reasonably expected to succeed because lights with mounting poles attached with brackets have been attached to many items such as guardrails for years using tools available in most hardware stores and commonly fabricated in oil field equipment fabrication shops and rig upyards.

104. For example, a light fixture or other items are commonly attached to a handrail via a pole, a bracket, and/or one or more screws or bolts.



105. Poles have been attached to crown deck handrail with flag, airplane lights, and other structures attached.



106. There are only a finite number of ways to attach lights to a crown deck or its surrounding handrail. As described above, the POSITA had good reasons to pursue the known options in the Larson Electronics / Magnalight YouTube video to replace Gowanlock 1's pole mounted lights near the internal floor of

the crown or the heavy frame lights of Gowanlock 2 using ordinary skill and common sense to arrive at Claims 9 and 19 of the '016 Patent.

Id., ¶¶98-106.¹⁷

VII. Claims 9 and 19 Are Invalid

A. Ground 1: Claims 9 and 19 are Obvious Over Gowanlock 1 in view of Swivelpole catalog

1. Claim 9

a. A rig comprising: a derrick; a crown deck at the top of the derrick, the crown deck comprising a handrail; and

Gowanlock 1 discloses a derrick with a crown deck at the top which has a handrail. Ex. 1003, Fig. 1A and Ex. 1008, ¶80 (with chart).

¹⁷ What's more, as described in the Swivelpole catalog its lighting solutions can reduce engineering cost, installation cost, labor cost, equipment cost, and potential injuries which are all independent motivations to employ its lighting solutions or variations thereof. Ex. 1004, p.2 of 28.

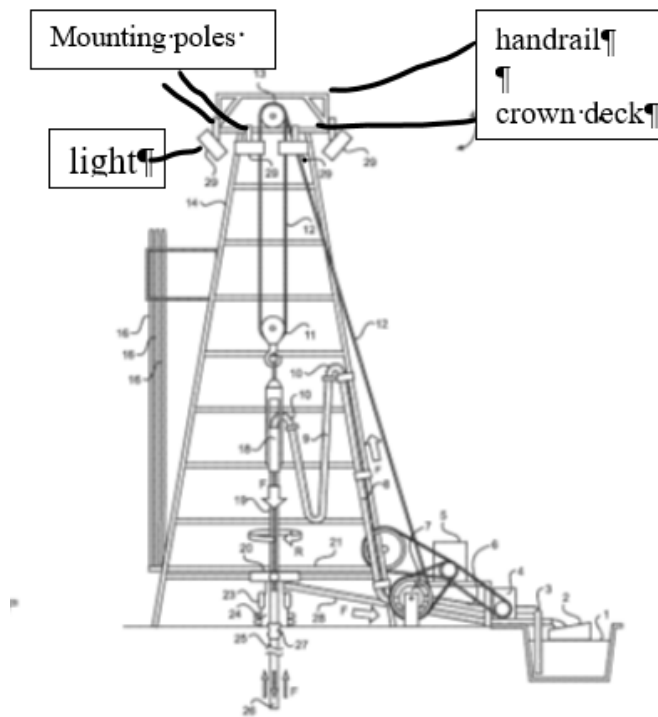


FIG. 1A

- b. a plurality of light units attached to the handrail, each light unit comprising: a mounting pole, wherein each light unit comprises a separate mounting pole, such that the system comprises a plurality of mounting poles; and a light fixture comprising one or more lights, the light fixture coupled to the mounting pole.

Gowanlock 1, e.g., Fig 1A above discloses a plurality of light units with each light unit separately attached to a crown deck of the rig with a mounting pole for illuminating a wellsite. Ex. 1003, pp. 10-11 of 16, Fig. 1A, 1B, and 2; Ex. 1008, ¶80 (with chart).

The Swivelpole catalog describes and shows attaching a mounting pole for a light to a handrail and attaching a light to it as shown below.

Petition for *Inter Partes* Review
U.S. Patent No. 10,900,626



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It would be obvious to attach a plurality of mounting poles with lights to the handrail of the crown deck as shown in the Swivelpole catalog instead of Gowanlock

1's pole mounted lights near the internal floor of the crown for at least the reasons described above in Section VIA.

Claim 9 is obvious.

2. Claim 19

a. A method for illuminating a wellsite, comprising:

Gowanlock 1 discloses a method for illuminating a wellsite. Ex. 1003, Fig. 1A;
Ex. 1008, ¶80 (with chart).

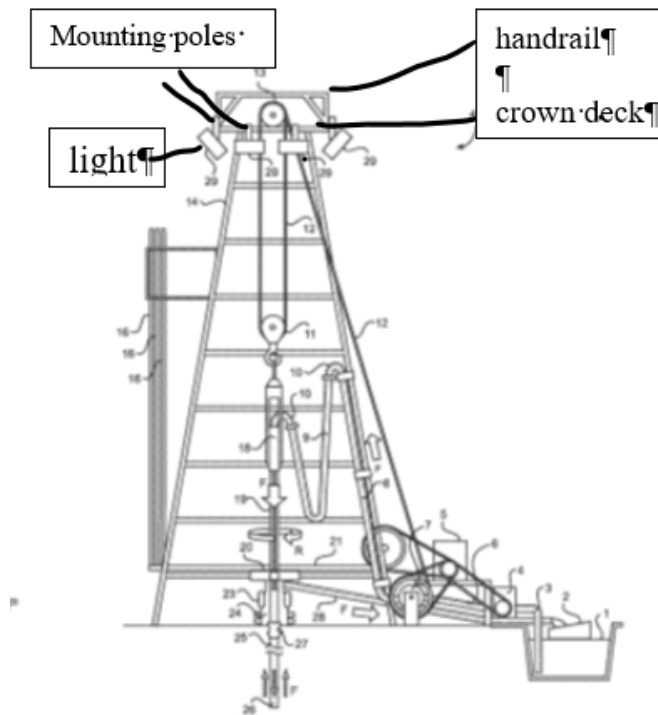


FIG. 1A

- b. mounting a plurality of mounting poles on a crown deck of a rig, wherein each of the plurality of mounting poles is attached to a handrail of the crown deck;**

Gowanlock 1, e.g., Fig 1A above discloses a plurality of light units with each light unit separately attached to a crown deck of the rig with a mounting pole for illuminating a wellsite. Ex. 1003, pp. 10-11 of 16, Fig. 1A, 1B, and 2; Ex. 1008, ¶80 (with chart).

The Swivelpole catalog describes and shows attaching a mounting pole for a light to a handrail and attaching a light to it as shown below.





It would be obvious to attach a plurality of mounting poles with lights to the handrail of the crown deck as shown in the Swivelpole catalog instead of Gowanlock 1's pole mounted lights near the internal floor of the crown for the reasons described above in Section VIA.

- c. **mounting a plurality of lights to the plurality of mounting poles, wherein each of the plurality of mounting poles supports at least one of the plurality of lights, and each of the plurality of lights is mounted to only one of the plurality of mounting poles; and**

Gowanlock 1, e.g., Fig 1A above discloses a plurality of light units with each light unit separately attached to a crown deck of the rig with a mounting pole for illuminating a wellsite. Ex. 1003, pp. 10-11 of 16, Fig. 1A, 1B, and 2; Ex. 1008, ¶80 (with chart).

The Swivelpole catalog describes and shows attaching a mounting pole for a light to a handrail and attaching a light to it.

It would be obvious to attach a plurality of mounting poles with lights to the handrail of the crown deck as shown in the Swivelpole catalog instead of Gowanlock 1's pole mounted lights near the internal floor of the crown for the reasons described above in Section VIA.

d. illuminating the wellsite using the plurality of lights.

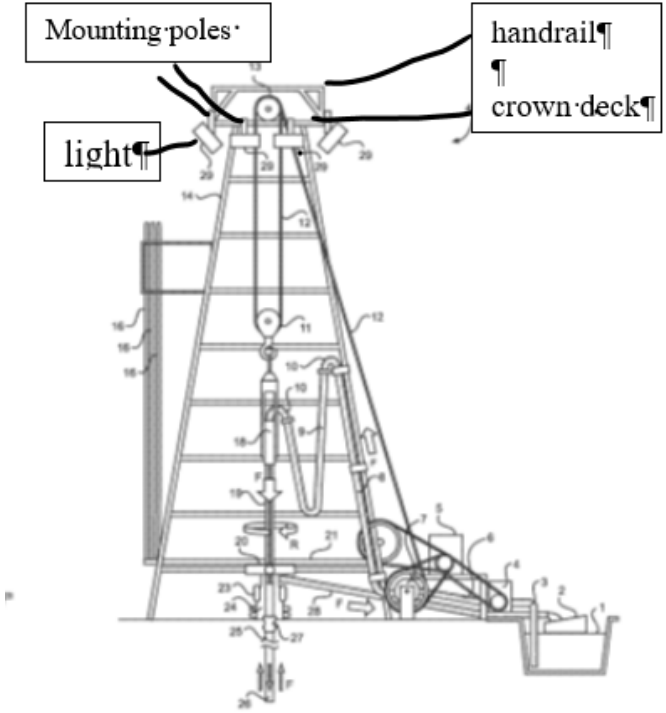
Of course, the reason to use a plurality of lights is to illuminate the wellsite as described in Gowanlock 1.

Claim 19 is obvious.

4. Summary Chart

A summary chart below shows Claims 9 and 19 are obvious.

US 10,900,626	
Claim Language	WO2018/042348 (Gowanlock 1) and Swivelpole
9. A rig comprising: a derrick; a crown deck at the top of the derrick, the crown deck comprising a handrail; and	FIG. 1A of Gowanlock 1 shows a modular lighting system with each light unit independently attached to a crown deck with a mounting pole. Figure 1A also shows a derrick with a crown deck at the top of the derrick and a handrail associated with the crown deck.

	 FIG. 1A Annotated Fig. 1A
a plurality of light units attached to the handrail, each light unit comprising: a mounting pole, wherein each light unit comprises a separate mounting pole, such that the system comprises a plurality of mounting poles; and a light fixture comprising one or more lights, the light fixture coupled to the mounting pole.	A POSITA would readily modify Gowanlock 1 to employ lights, separate mounting poles, and brackets shown in the Swivelpole catalog to make a modular lighting system as shown in the Swivelpole catalog mounted to a handrail.

	 Swivelpole catalog photo
Claim Language	
19. A method for illuminating a wellsite, comprising:	Figure 1A of Gowanlock 1 above shows a lighting system for illuminating a wellsite.
mounting a plurality of mounting poles on a crown deck of a rig, wherein each of the plurality of mounting poles is attached to a handrail of the crown deck;	FIG. 1A of Gowanlock 1 above shows a modular lighting system with each light unit separately attached to a crown deck with a mounting pole. A POSITA would readily modify Gowanlock 1 to employ lights mounted to separate mounting poles attached to a crown deck handrail as shown in the Swivelpole catalog photos above.
mounting a plurality of lights to the plurality of mounting poles, wherein each of the plurality of mounting poles supports at least one of the plurality of lights, and each of the plurality of lights is mounted to only	FIG. 1A of Gowanlock 1 above shows a modular lighting system with each light unit separately attached to a crown deck with a mounting pole.

one of the plurality of mounting poles; and	A POSITA would readily modify Gowanlock 1 to employ lights mounted to separate mounting poles attached to a crown deck handrail as shown in the Swivelpole catalog photos above.
illuminating the wellsite using the plurality of lights.	The reason to use a plurality of lights is to illuminate the wellsite as described in Gowanlock 1.

B. Ground 2: Claims 9 and 19 are Obvious Over Gowanlock 2 and the Swivelpole Catalog

1. Claim 9

a. A rig comprising: a derrick; a crown deck at the top of the derrick, the crown deck comprising a handrail; and

Gowanlock 2 discloses a derrick with a crown deck at the top which has a handrail. Ex. 1058, Fig. 1 and Ex. 1008, ¶88 (with chart). As stated in Gowanlock 2:

“Crown 100 includes a base 105 and an outer frame structure 110 including vertical 115 and horizontal 120 frame members arranged to extend from the base 105 such that the base 105 provides an internal floor to the crown 100.” Ex. 1058, 4:49-53.

Thus, just as in Gowanlock 1, in Gowanlock 2 there is a crown deck and an associated handrail. That is, the crown deck is 105 while the upper horizontal frame member 120 is the crown deck’s associated handrail as indicated in the annotated figure below. Ex. 1008, ¶70.

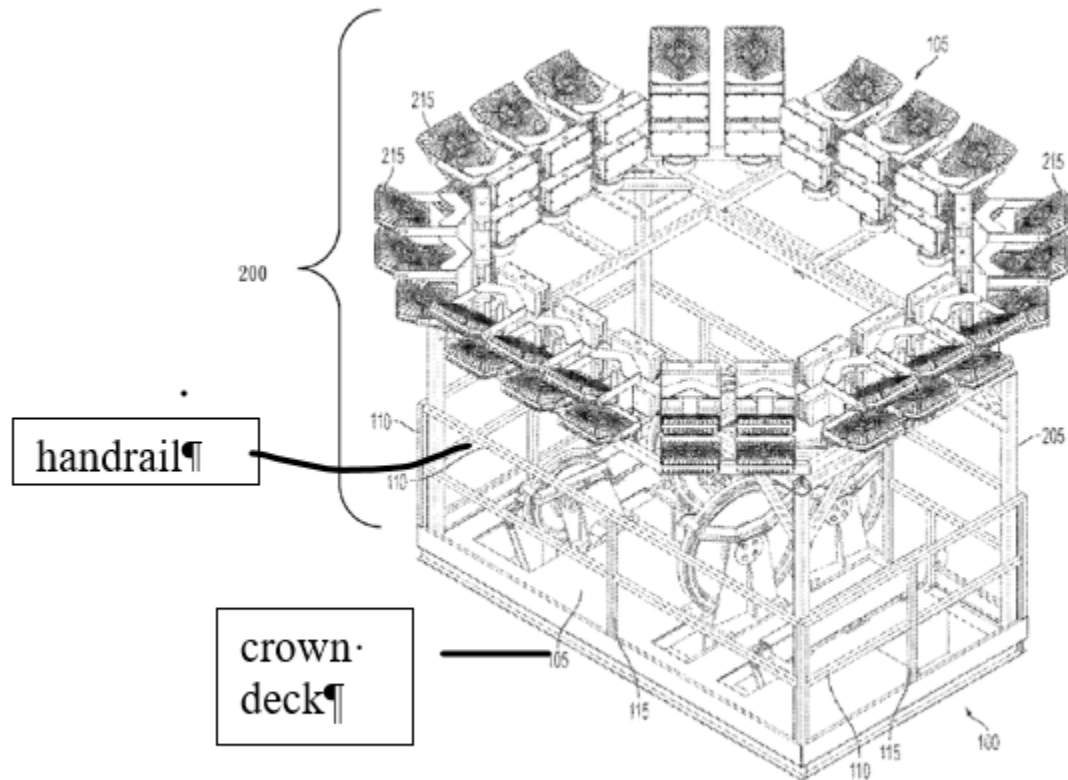


FIG. 1

- b. a plurality of light units attached to the handrail, each light unit comprising: a mounting pole, wherein each light unit comprises a separate mounting pole, such that the system comprises a plurality of mounting poles; and a light fixture comprising one or more lights, the light fixture coupled to the mounting pole.

As Gowanlock 2 describes, a lighting frame 205 includes a “plurality of light support posts 210 arranged around a perimeter of the lighting frame and extending vertically such that one or more light fixtures 215, 215a and 215b may be connected to each light support

post 210. The plurality of light fixtures 215 arranged and separated vertically from each other by their positioning on the light support posts 210 permits for light to be directed in a predetermined region proximate the crown 100 and at a predetermined region encompassing a ground area surrounding the drill rig. That is, one group of lights may be directed towards particular equipment on the drilling rig, while another group may be directed to an area surrounding the drilling rig to provide maximum lighting for personnel working in or around the drilling rig.”

Ex. 1058, 4:63-5:10.

The Swivelpole catalog describes and shows attaching a mounting pole for a light to a handrail and attaching a light to it as shown below.



Officially certified to withstand the world's strongest winds

There's no pole stronger than a Swivelpole™. They've been put through rigorous independent engineering simulations and analysis, including wind tunnel testing, to prove they will withstand the harshest conditions and even cyclonic winds over 200mph.

In fact, Swivelpole™ is built so tough, it will easily outlast the life of a typical project or plant.

That is why it's been the luminaire support solution of choice in some of the world's most remote and challenging locations since 1999.

Swivelpole™
Lowering Costs, Raising Standards



It would be obvious to attach a plurality of mounting poles with lights to the handrail of the crown deck as shown in the Swivelpole catalog instead of Gowanlock 2's frame mounted lights for at least the reasons described above in Section VIB.

Claim 9 is obvious.

2. Claim 19

a. A method for illuminating a wellsite, comprising:

Gowanlock 2 discloses a method for illuminating a wellsite. Ex. 1058, Fig. 1 and Ex. 1008, ¶88 (with chart).

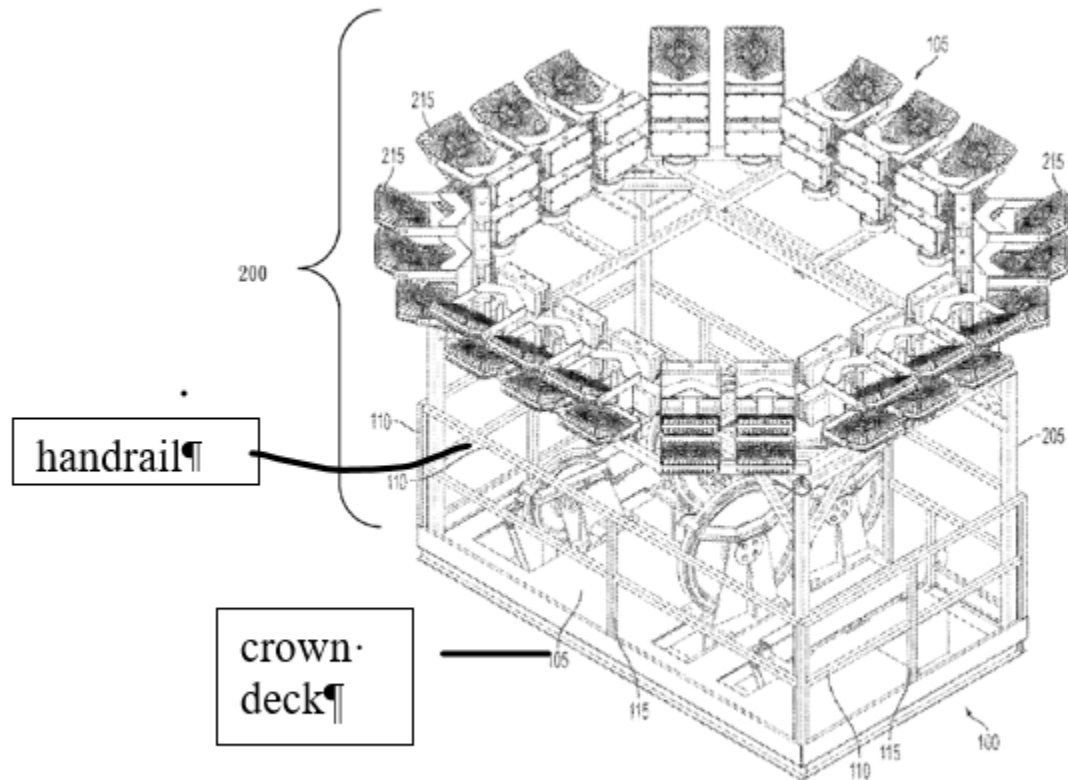


FIG. 1

- b. mounting a plurality of mounting poles on a crown deck of a rig, wherein each of the plurality of mounting poles is attached to a handrail of the crown deck;

As Gowanlock 2 describes, a lighting frame 205 includes a

“plurality of light support posts 210 arranged around a perimeter of the lighting frame and extending vertically such that one or more light fixtures 215 ,215a and 215b may be connected to each light support post 210. The plurality of light fixtures 215 arranged and separated vertically from each other by their positioning on the light support posts

210 permits for light to be directed in a predetermined region proximate the crown 100 and at a predetermined region encompassing a ground area surrounding the drill rig. That is, one group of lights may be directed towards particular equipment on the drilling rig, while another group may be directed to an area surrounding the drilling rig to provide maximum lighting for personnel working in or around the drilling rig.”

Ex. 1058, 4:63-5:10.

The Swivelpole catalog describes and shows attaching a mounting pole for a light to a handrail and attaching a light to it as shown below. The Swivelpole catalog describes and shows attaching a mounting pole for a light to a handrail and attaching a light to it as shown below.





It would be obvious to attach a plurality of mounting poles with lights to the handrail of the crown deck as shown in the Swivelpole catalog instead of Gowanlock 1's pole mounted lights near the internal floor of the crown for the reasons described above in Section VIA.

- c. mounting a plurality of lights to the plurality of mounting poles, wherein each of the plurality of mounting poles supports at least one of the plurality of lights, and each of the plurality of lights is mounted to only one of the plurality of mounting poles; and**

As Gowanlock 2 describes, a lighting frame 205 includes a

“plurality of light support posts 210 arranged around a perimeter of the lighting frame and extending vertically such that one or more light fixtures 215 ,215a and 215b may be connected to each light support

post 210. The plurality of light fixtures 215 arranged and separated vertically from each other by their positioning on the light support posts 210 permits for light to be directed in a predetermined region proximate the crown 100 and at a predetermined region encompassing a ground area surrounding the drill rig. That is, one group of lights may be directed towards particular equipment on the drilling rig, while another group may be directed to an area surrounding the drilling rig to provide maximum lighting for personnel working in or around the drilling rig.”

Ex. 1058, 4:63-5:10.

The Swivelpole catalog describes and shows attaching a mounting pole for a light to a handrail and attaching a light to it as shown below. The Swivelpole catalog describes and shows attaching a mounting pole for a light to a handrail and attaching a light to it.

It would be obvious to attach a plurality of mounting poles with lights to the handrail of the crown deck as shown in the Swivelpole catalog instead of Gowanlock 1's pole mounted lights near the internal floor of the crown for the reasons described above in Section VIA.

d. illuminating the wellsite using the plurality of lights.

Of course, the reason to use a plurality of lights is to illuminate the wellsite as described in Gowanlock 2.

Claim 19 is obvious.

4. Summary Chart

A summary chart below shows Claims 9 and 19 are obvious.

US 10,900,626	
Claim Language	U.S. Patent No. 9,316,390 (Gowanlock 2) and Swivelpole
9. A rig comprising: a derrick; a crown deck at the top of the derrick, the crown deck comprising a handrail; and	FIG. 1 of Gowanlock 2 shows a derrick with a crown deck at the top of the derrick and a handrail associated with the crown deck. FIG. 1 Annotated Fig. 1
a plurality of light units	A POSITA would readily modify Gowanlock 2 to employ lights, separate mounting poles, and brackets shown in the Swivelpole

attached to the handrail, each light unit comprising: a mounting pole, wherein each light unit comprises a separate mounting pole, such that the system comprises a plurality of mounting poles; and a light fixture comprising one or more lights, the light fixture coupled to the mounting pole.	catalog to make a modular lighting system as shown in the Swivelpole catalog mounted to a handrail.  Officially certified to withstand the world's strongest winds There's no pole stronger than a Swivelpole™. They've been put through rigorous independent engineering simulations and analysis, including wind tunnel testing, to prove they will withstand the harshest conditions and even cyclonic winds over 200mph. In fact, Swivelpole™ is built so tough, it will easily outlast the life of a typical project or plant. That is why it's been the luminaire support solution of choice in some of the world's most remote and challenging locations since 1999. Swivelpole™ Lowering Costs, Raising Standards Swivelpole catalog photo
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Claim Language	
19. A method for illuminating a wellsite, comprising:	Figure 1 of Gowanlock 2 above shows a lighting system for illuminating a wellsite.
mounting a plurality of mounting poles on a crown deck of a rig, wherein each of the plurality of mounting poles is attached to a handrail of the crown deck;	FIG. 1 of Gowanlock 2 above shows a lighting frame 205 includes a “plurality of light support posts 210 arranged around a perimeter of the lighting frame and extending vertically such that one or more light fixtures 215, 215a and 215b may be connected to each light support post 210. The plurality of light fixtures 215 arranged and separated vertically from each other by their positioning on the light support posts 210 permits for light to be directed in a predetermined region proximate the crown 100 and at a predetermined region encompassing a ground area surrounding the drill rig. Ex. 1058, 4:63-5:10. A POSITA would readily modify Gowanlock 2 to employ lights mounted to separate mounting poles attached to a crown deck handrail as shown in the Swivelpole catalog photos above.
mounting a plurality of lights to the plurality of mounting poles,	FIG. 1 of Gowanlock 2 above shows a lighting system for illuminating a wellsite. A POSITA would readily modify Gowanlock 2 to employ lights mounted to separate mounting poles attached to a crown deck handrail as shown in the Swivelpole catalog photos above.

wherein each of the plurality of mounting poles supports at least one of the plurality of lights, and each of the plurality of lights is mounted to only one of the plurality of mounting poles; and	
illuminating the wellsite using the plurality of lights.	The reason to use a plurality of lights is to illuminate the wellsite as described in Gowanlock 2.

C. Ground 3: Claims 9 and 19 are Obvious Over Gowanlock 1 or Gowanlock 2 in view of the Magnalight YouTube Video

1. Claim 9

- a. A rig comprising: a derrick; a crown deck at the top of the derrick, the crown deck comprising a handrail; and**

Both Gowanlock 1 and Gowanlock 2 disclose a derrick with a crown deck at the top which has a handrail.

Gowanlock 1 discloses a derrick with a crown deck at the top which has a handrail. Ex. 1003, Fig. 1A and Ex. 1008, ¶97 (with chart).

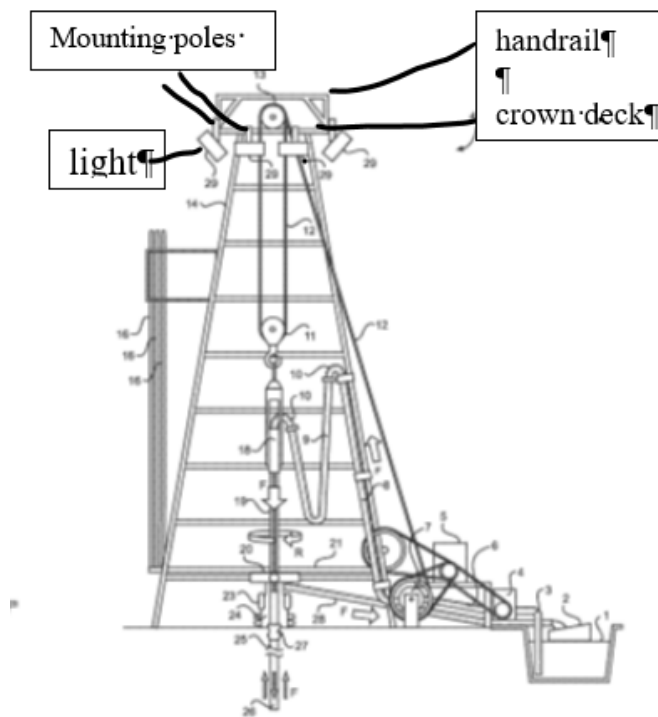


FIG. 1A

Gowanlock 2 discloses a derrick with a crown deck at the top which has a handrail. Ex. 1058, Fig. 1 and Ex. 1008, ¶ (with chart). As stated in Gowanlock 2:

“Crown 100 includes a base 105 and an outer frame structure 110 including vertical 115 and horizontal 120 frame members arranged to extend from the base 105 such that the base 105 provides an internal floor to the crown 100.” Ex. 1058, 4:49-53.

Thus, just as in Gowanlock 1, in Gowanlock 2 there is a crown deck and an associated handrail. That is, the crown deck is 105 while the upper horizontal frame member 120 is the crown deck’s associated handrail as indicated in the annotated figure below. Ex. 1008, ¶70.

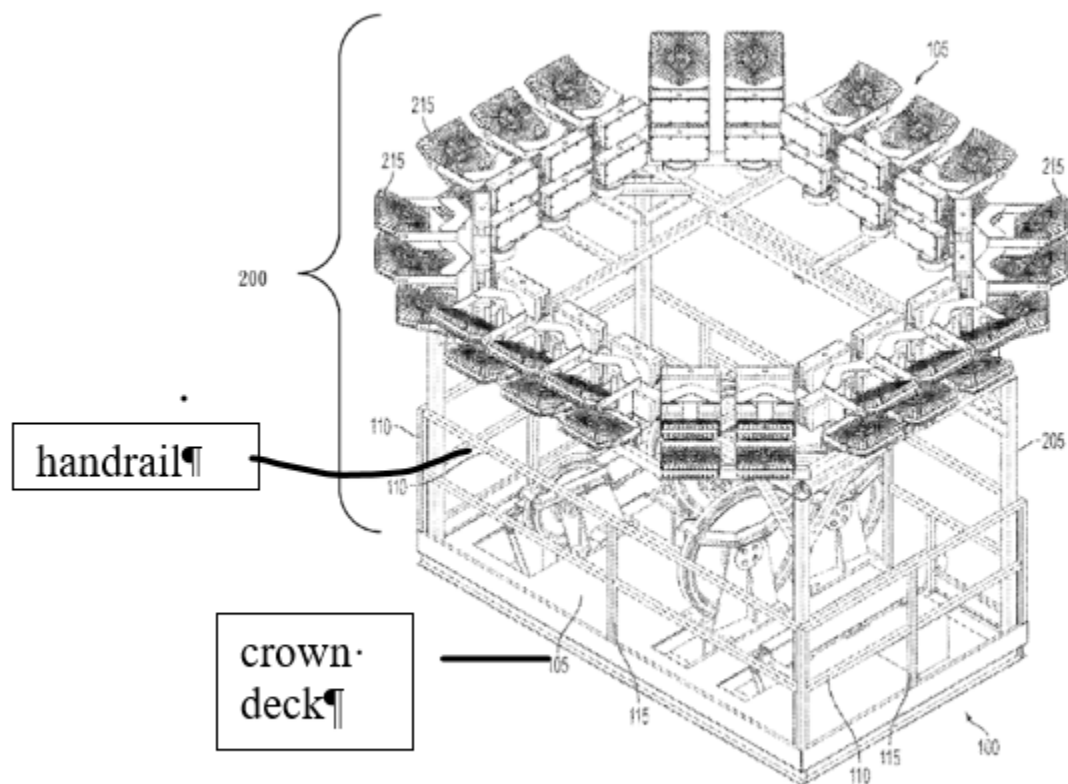


FIG. 1

- b. a plurality of light units attached to the handrail, each light unit comprising: a mounting pole, wherein each light unit comprises a separate mounting pole, such that the system comprises a plurality of mounting poles; and a light fixture comprising one or more lights, the light fixture coupled to the mounting pole.**

Both Gowanlock 1 and Gowanlock 2 describe lights attached to a crown deck.

Gowanlock 1, e.g., Fig 1A above discloses a plurality of light units with each light unit separately attached to a crown deck of the rig with a mounting pole for illuminating a wellsite. Ex. 1003, pp. 10-11 of 16, Fig. 1A, 1B, and 2; Ex. 1008, ¶83 (with chart).

As Gowanlock 2 describes, a lighting frame 205 includes a “plurality of light support posts 210 arranged around a perimeter of the lighting frame and extending vertically such that one or more light fixtures 215, 215a and 215b may be connected to each light support post 210. The plurality of light fixtures 215 arranged and separated vertically from each other by their positioning on the light support posts 210 permits for light to be directed in a predetermined region proximate the crown 100 and at a predetermined region encompassing a ground area surrounding the drill rig. That is, one group of lights may be directed towards particular equipment on the drilling rig, while another

group may be directed to an area surrounding the drilling rig to provide maximum lighting for personnel working in or around the drilling rig.”

Ex. 1058, 4:63-5:10.

As shown in the photos below, the Magnalight YouTube video discloses a light fixture comprising one or more lights and that the light fixture is coupled to the mounting pole attached to a handrail. Ex. 1006; Ex. 1008, including ¶97.





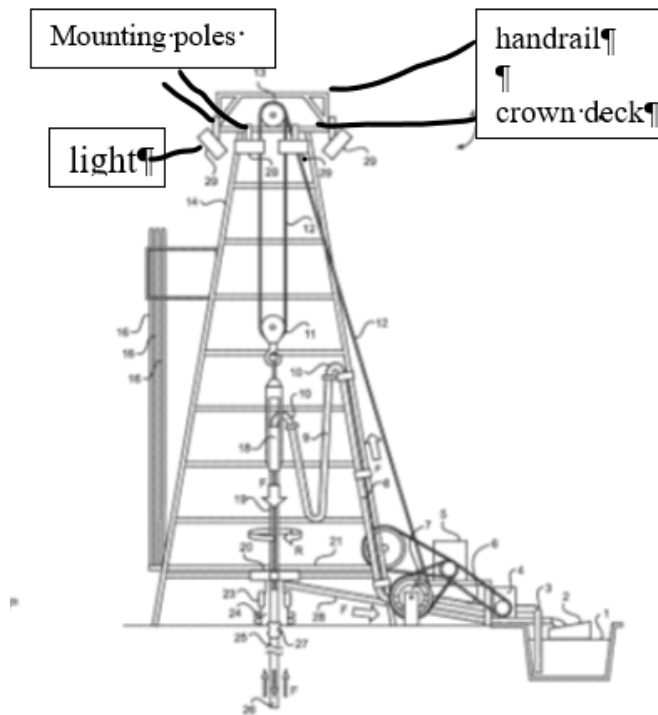
It would be obvious to attach a plurality of mounting poles with lights to the handrail of the crown deck as shown in Magnalight YouTube video instead of Gowanlock 1's pole mounted lights near the internal floor of the crown or instead of Gowanlock 2's lighting frame for the reasons described above in Section VIC. Claim 9 is obvious.

2. Claim 19

a. A method for illuminating a wellsite, comprising:

Both Gowanlock 1 and Gowanlock 2 disclose a method for illuminating a wellsite.

Gowanlock 1 discloses a method for illuminating a wellsite. Ex. 1003, Fig. 1A; Ex. 1008, ¶97 (with chart).



Gowanlock 2 discloses a method for illuminating a wellsite. Ex. 1058, Fig. 1 and Ex. 1008, ¶97 (with chart).

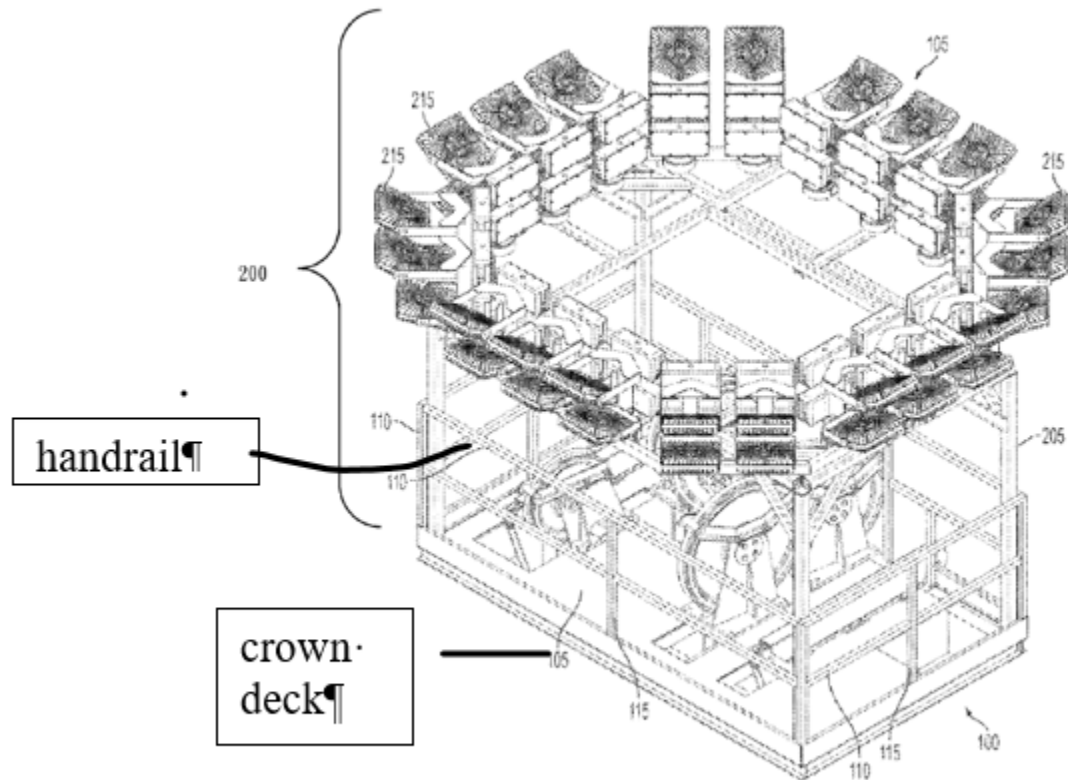


FIG. 1

- b. mounting a plurality of mounting poles on a crown deck of a rig, wherein each of the plurality of mounting poles is attached to a handrail of the crown deck;

Both Gowanlock 1 and Gowanlock 2 describe lights attached to a crown deck.

Gowanlock 1, e.g., Fig 1A above discloses a plurality of light units with each light unit separately attached to a crown deck of the rig with a mounting pole for illuminating a wellsite. Ex. 1003, pp. 10-11 of 16, Fig. 1A, 1B, and 2; Ex. 1008, ¶83 (with chart).

As Gowanlock 2 describes, a lighting frame 205 includes a

“plurality of light support posts 210 arranged around a perimeter of the lighting frame and extending vertically such that one or more light fixtures 215, 215a and 215b may be connected to each light support post 210. The plurality of light fixtures 215 arranged and separated vertically from each other by their positioning on the light support posts 210 permits for light to be directed in a predetermined region proximate the crown 100 and at a predetermined region encompassing a ground area surrounding the drill rig. That is, one group of lights may be directed towards particular equipment on the drilling rig, while another group may be directed to an area surrounding the drilling rig to provide maximum lighting for personnel working in or around the drilling rig.”

Ex. 1058, 4:63-5:10.

As shown in the photos below, the Magnalight YouTube video discloses a light fixture comprising one or more lights and that the light fixture is coupled to the mounting pole attached to a handrail. Ex. 1006; Ex. 1008, including ¶97.





It would be obvious to attach a plurality of mounting poles with lights to the handrail of the crown deck as shown in Magnalight YouTube video instead of Gowanlock 1's pole mounted lights near the internal floor of the crown or instead of Gowanlock 2's lighting frame for the reasons described above in Section VIC.

- c. **mounting a plurality of lights to the plurality of mounting poles, wherein each of the plurality of mounting poles supports at least one of the plurality of**

lights, and each of the plurality of lights is mounted to only one of the plurality of mounting poles; and

As shown in the photos below, the Magnalight YouTube video discloses a light fixture comprising one or more lights and that the light fixture is coupled to the mounting pole attached to a handrail. Ex. 1006; Ex. 1008, including ¶¶97.

It would be obvious to attach a plurality of mounting poles with lights to the handrail of the crown deck as shown in Magnalight YouTube video instead of Gowanlock 1's pole mounted lights near the internal floor of the crown or instead of Gowanlock 2's lighting frame for the reasons described above in Section VIC.

d. illuminating the wellsite using the plurality of lights.

Of course, the reason to use a plurality of lights is to illuminate the wellsite as described in both Gowanlock 1 and Gowanlock 2.

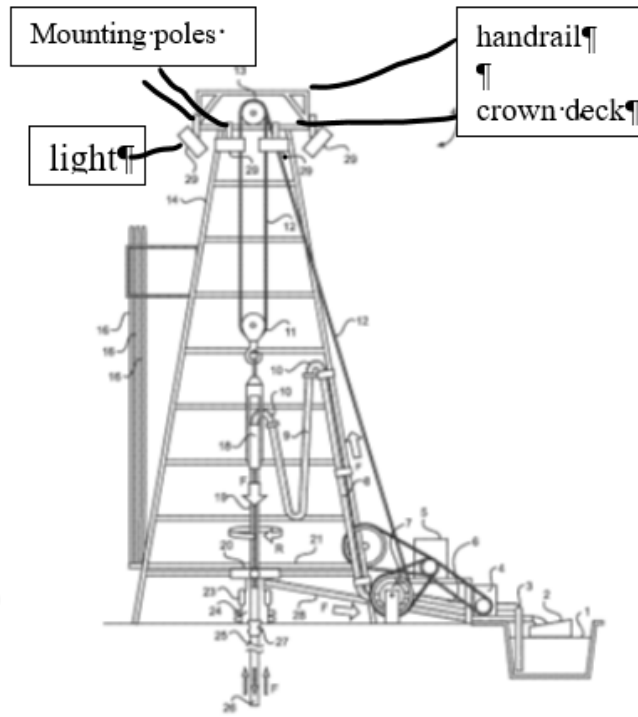
Claim 19 is obvious.

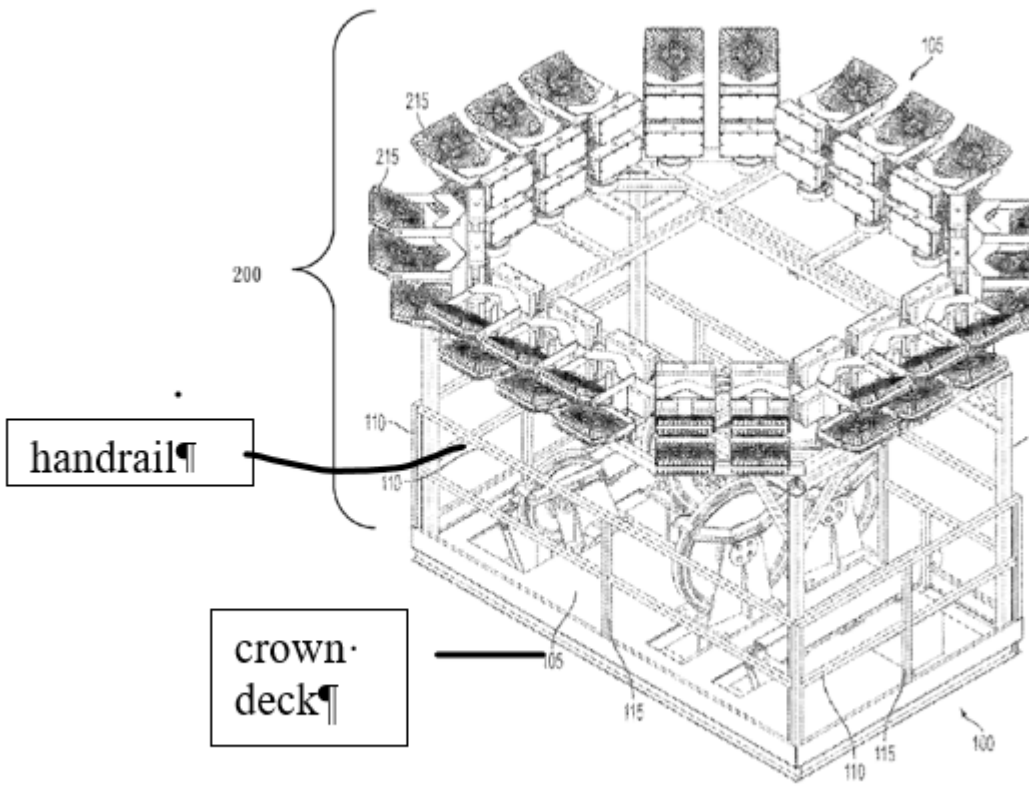
4. Summary Chart

The summary chart below shows Claims 9 and 19 are obvious.

US 10,900,626	
Claim Language	WO2018/042348 (Gowanlock 1) or U.S. Patent No. 9,316,390 (Gowanlock 2) and Magnalight Youtube video
9. A rig comprising: a derrick; a crown deck at the top of the	FIG. 1 of Gowanlock 1 and Gowanlock 2 each shows a derrick with a crown deck at the top of the derrick and a handrail associated with the crown deck.

derrick,
the crown
deck
comprisin
g a
handrail;
and



	 FIG. 1 Annotated Fig. 1
a plurality of light units attached to the handrail, each light unit comprising: - a mounting pole, - wherein	A POSITA would readily modify Gowanlock 1 or Gowanlock 2 to employ lights, separate mounting poles, and brackets shown in the Magnalight YouTube video to make a modular lighting system as shown in the Magnalight YouTube video mounted to a handrail.

each light unit comprises a separate mounting pole, such that the system comprises a plurality of mounting poles; and a light fixture comprising one or more lights, the light fixture coupled to the mounting pole.		
Claim Language		
19. A method for illuminating a wellsite, comprising:	Gowanlock 1 and Gowanlock 2 above each show a lighting system for illuminating a wellsite.	
mounting a plurality of	Gowanlock 1, e.g., Fig 1A above discloses a plurality of light units with each light unit separately attached to a crown deck of the rig with	

mounting poles on a crown deck of a rig, wherein each of the plurality of mounting poles is attached to a handrail of the crown deck;	a mounting pole for illuminating a wellsite. Ex. 1003, pp. 10-11 of 16, Fig. 1A, 1B, and 2; Ex. 1008, ¶83 (with chart). FIG. 1 of Gowanlock 2 above shows a lighting frame 205 includes a “plurality of light support posts 210 arranged around a perimeter of the lighting frame and extending vertically such that one or more light fixtures 215, 215a and 215b may be connected to each light support post 210. The plurality of light fixtures 215 arranged and separated vertically from each other by their positioning on the light support posts 210 permits for light to be directed in a predetermined region proximate the crown 100 and at a predetermined region encompassing a ground area surrounding the drill rig. Ex. 1058, 4:63-5:10. A POSITA would readily modify Gowanlock 1 or Gowanlock 2 to employ lights, separate mounting poles, and brackets shown in the Magnalight YouTube video to make a modular lighting system as shown in the Magnalight YouTube video mounted to a handrail.
mounting a plurality of lights to the plurality of mounting poles, wherein each of the plurality of mounting poles supports at least one of the plurality of lights,	Fig 1A of Gowanlock 1 above and FIG. 1 of Gowanlock 2 above each show a lighting system for illuminating a wellsite. A POSITA would readily modify Gowanlock 1 or Gowanlock 2 to employ lights, separate mounting poles, and brackets shown in the Magnalight YouTube video to make a modular lighting system as shown in the Magnalight YouTube video mounted to a handrail..

and each of the plurality of lights is mounted to only one of the plurality of mounting poles; and	
illuminating the wellsite using the plurality of lights.	The reason to use a plurality of lights is to illuminate the wellsite as described in Gowanlock 2.

VIII. Secondary Considerations Cannot Overcome the Strong Evidence of Obviousness

Where, as here, a strong prima facie case of obviousness exists (and anticipation in Ground 1), secondary considerations may not dislodge the final conclusion of obviousness. *See, e.g., Leapfrog Enters., Inc. v. Fisher-Price, Inc.*, 485 F.3d 1157, 1162 (Fed. Cir. 2007). At this stage, because of the “absence of a complete evidentiary record,” Petitioner need not further address secondary considerations. *Ranir, LLC v. The Procter & Gamble Co.*, IPR2017-01878, Paper 7, at 32 (PTAB Feb. 7, 2018); *accord 3Shape A-S v. Align Tech., Inc.*, IPR2019-00160, Paper 9, at 34 (PTAB June 11, 2019). This is apposite here, where the Examiner did not rely on evidence of

secondary considerations in allowing Claims, 1, 2, or 23. *See Zip Top, LLC v. Stasher, Inc.*, IPR2018-01216, Paper 14, at 37 (Jan. 17, 2019). Petitioner reserves the right to respond to any evidence of alleged secondary considerations Patent Owner of Record proffers.

IX. This Petition Should Not Be Discretionarily Denied

General Plastics analysis is inapplicable as the ‘626 Patent has never been subject to a post-grant proceeding. The Board may consider parallel litigation in determining whether to institute under 35 U.S.C. § 314(a). *NHK Spring Co., Ltd., v. Intri-Plex Technologies, Inc.*, IPR2018-00752, Paper 8, at 19-20 (PTAB Sept. 12, 2018); *Apple Inc. v. Fintiv, Inc.*, IPR2020-00019, Paper 11, at 2-3, 6 (PTAB Mar. 20, 2020). Those factors favor institution here.

Factor 1—Whether the Court Granted a Stay or May Grant One if a Proceeding is Instituted. Petitioner intends to move the Court to stay the litigation after filing this Petition.

The potential simplification weighs against the exercising of discretion. At worst, this factor is neutral because the Board “will not attempt to predict” how the district court will proceed. *Sand Revolution II, LLC v. Continental Intermodal Group-Trucking LLC*, IPR2019-01393, Paper 24, at 7 (PTAB Jun. 16, 2020).

Factor 2—Proximity of Trial Date to FWD Deadline. “This factor looks at the proximity of the trial date to the date of [FWD] to assess the weight to be accorded a

trial date set earlier than the expected [FWD] date.” *Shenzhen Carku Tech. Co., Ltd. v. The Noco Co.*, IPR2020-00944, Paper 20, at 61 (PTAB Nov. 12, 2020). Here, if this IPR is instituted and the case were not somehow stayed then the IPR would be complete just after the current, initial setting of the trial date in January 2025. Ex. 1017.

Trial dates, however, are unreliable and should not be used to deny institution. *In re Apple Inc.*, 979 F.3d 1332, 1344 (Fed. Cir. 2020); *DISH Network L.L.C. v. Broadband iTV, Inc.*, IPR2020-01280, Paper 17, at 13-16 (PTAB Feb. 4, 2021). The Federal Circuit found error in the Board’s reliance on the case’s scheduled trial date. *Apple*, 979 F.3d at 1344. It would be error for the Board to speculatively rely upon the current schedule.

The Board has repeatedly been persuaded by the uncertainty in litigation timelines regardless the set trial date, especially when within a few months of the expected FWD. *Sand Revolution*, Paper 24 at 8-9; *see also* IPR2021-00255, Paper 22 at 11-12 (PTAB Aug. 23, 2021) (declining to exercise discretionary denial when trial date was set for two months after expected FWD). These uncertainties are persuasive here. Director Vidal noted the PTAB will consider median time to trial in its analysis. Ex. 1018, at 3.

Factor 3—Investment in Parallel Proceeding by the Court and Parties. The parties have made minimal investment in the underlying case. As the Board explained

in *Fintiv*, where “the petitioner filed the petition expeditiously, such as promptly after becoming aware of the claims being asserted, this fact has weighed against exercising the authority to deny institution under *NHK*.” IPR2020-00019, Paper 11, at 1. No claim construction ruling has occurred, only one term is even disputed, that term is irrelevant to obviousness over the references here, and fact and expert discovery has yet to begin in earnest. This weighs in favor of institution. *See, e.g., Nokia of America Corp and Ericsson Inc. v. IPCOM, GMBH & Co. KG*, IPR2021-00533, Paper 10, at 9-10 (PTAB Aug. 12, 2021) (finding lack of substantive orders from district court weighs against denying institution).

Factor 4—Overlap Between Issues Raised in Petition and Parallel Proceeding. Petitioner challenges all asserted claims of the ‘626 Patent. Petitioner stipulates that if the Board institutes the petition, consistent with 35 USC § 315(e)(2), it will not seek resolution in the District Court on the same grounds asserted here in -- Grounds 1-3 -- or any grounds that could have reasonably been raised in the petition. This favors institution. *See Ex. 1018*, at 7 (“... the PTAB will not discretionarily deny institution of an IPR or PGR in view of parallel district court litigation where a petition stipulates not to pursue in a parallel district court proceeding the same grounds in the petition or any grounds that could have reasonably raised in the petition.”)

Factor 5—Petitioner and Defendant in Parallel Proceeding are the Same.

The Parties are the same in the underlying case. *Cf. Cisco Sys., Inc. v. Ramot at Tel Aviv Univ. Ltd.*, IPR2020-00122, Paper 15, at 10 (PTAB May 15, 2020) (disfavoring “defendant in the district court” is “contrary to the goal of providing district court litigants an alternative venue to resolve questions of patentability”).

Factor 6—Other Circumstances Impacting Board’s Exercise of Discretion, Including Merits. Every element of the asserted claims is disclosed or obvious in view of well-known art. Director Vidal stated “the PTAB will not deny institution based on *Fintiv* if there is compelling evidence of unpatentability.” Ex. 1018, at 4-5. Furthermore, the Board must first address *Fintiv* factors 1-5, and should engage the compelling merits question in Factor 6 only if that analysis favors discretionary denial. When addressing compelling merits, the Board must provide reasoning, beyond pointing to its analysis under the lower institution standard, to explain and support its determination, sufficient to allow for review of that decision. See PTAB precedential decision, *CommScope Techs. LLC. v. Dali Wireless, Inc.*, IPR2022-01242, Paper 23 (February 27, 2023).

X. Conclusion

Petitioner requests that the Board grant this Petition.

XI. Mandatory Notices

A. Real Parties in Interest (37 C.F.R. § 42.8(b)(1))

Ensign US Southern Drilling LLC is the real party in interest for this Petition.

See also below regarding Nabors.

B. Related Matters (37 C.F.R. § 42.8(b)(2))

The '626 Patent is asserted against Petitioner in *C&M Oilfield Rentals, LLC D/B/A C-Mor Energy Services v. Ensign US Southern Drilling LLC*, Civil Action No. 4:22-cv-00965, Southern District of Texas, Houston Division (served April 1, 2022; amended complaint raising '626 Patent served March 30, 2023).

A child application of the '626 Patent became U.S. Patent 10,976,016 which patent is the subject of currently pending *Inter Partes* Review No. IPR2023-0084 filed March 30, 2023. U.S. Patent 10,976,016 was also involved in the case *C&M Oilfield Rentals, LLC v. Apollo Lighting Solutions, Inc. and Cleantek Industries, Inc.*, Civil Action No. 6:21-CV-00544-ADA, Western District of Texas, Waco Division. U.S. Patent 10,976,016 is also asserted against Petitioner in the above case of *C&M Oilfield Rentals, LLC D/B/A C-Mor Energy Services v. Ensign US Southern Drilling LLC*, Civil Action No. 4:22-cv-00965, Southern District of Texas, Houston Division.

In the case of *Nabors v. C&M*, Case No. 4:22-cv-02140, Southern District of Texas, Houston Division involving a related patent Nabors asserts ownership of the '626 Patent among others in the portfolio. As required, Ensign US has served the

USPTO correspondent for the Patent Owner of Record *C&M Oilfield Rentals, LLC D/B/A C-Mor Energy Services*. C&M Oilfield Rentals, LLC D/B/A C-Mor Energy Services should determine what, if any, service on and/or involvement by is required with respect to Nabors which alleges to be the '626 Patent Owner.

C. Designation of Lead and Backup Counsel (37 C.F.R. § 42.8(b)(3)) and Service Information (37 C.F.R. § 42.8(b)(4))

Lead Counsel	Backup Counsel
Gregory L. Porter Reg. No. 40,131 600 Travis St., Suite 4200 Houston, TX 77002 Office: 713.220.4621 Fax: 713.220.4285 gregporter@HuntonAK.com	Daniel Shanley Reg. No. 54,863 2200 Pennsylvania Avenue NW Washington, DC 20037 Office: 202.662.3047 Fax: 202.778.2201 danshanley@HuntonAK.com

Petitioner may be served via email to its lead and backup counsel at the email addresses above.

D. Payment of Fees (37 C.F.R. § 42.103)

This Petition requests review of claims 9 and 19 of the '626 Patent and is accompanied by a payment of \$41,500, which includes the \$19,000 IPR request fee and the \$22,500 post- institution fee. *See* 37 C.F.R. § 42.15(a). Thus, this Petition meets the fee requirements under 35 U.S.C. § 312(a)(1). The Board is hereby authorized to charge any additional fees required or refund any excess fees paid in this action to Deposit Account No. (116814.00000008).

Petition for *Inter Partes* Review
U.S. Patent No. 10,900,626

E. Power of Attorney (37 C.F.R. § 42.10)

Powers of attorney are filed herewith in accordance with 37 C.F.R. § 42.10(b).

Respectfully submitted,

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CERTIFICATE OF WORD COUNT

The undersigned certifies pursuant to 37 C.F.R. § 42.24(d) that the foregoing Petition for *Inter Partes* Review excluding any table of contents, table of authorities, certificates of service or word count, or appendix of exhibits or claim listing, contains 12,934 words according to the word-processing program used to prepare this paper (Microsoft Word). Petitioner certifies that this Petition for *Inter Partes* Review does not exceed the applicable type-volume limit of 37 C.F.R. § 42.24(a).

Dated: October 5, 2023

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Counsel for Petitioner

CERTIFICATE OF SERVICE

The undersigned hereby certifies that a copy of this Petition for *Inter Partes* Review of U.S. Patent No. 10,900,626, including its supporting Exhibits has been served via FedEx on October 5, 2023 upon Patent Owner of Record's correspondence address of record for U.S. Patent No. 10,900,626:

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