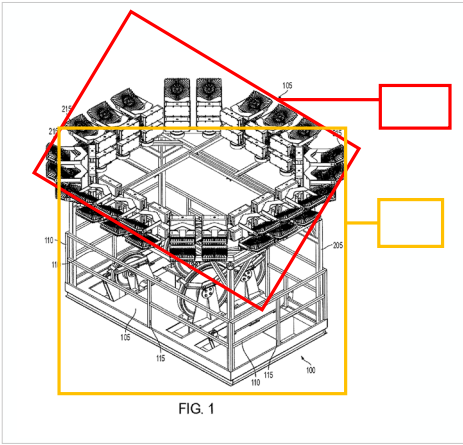


U.S. Patent No. 10,976,016 – CLAIMS 1, 2, and 23

Obvious (35 U.S.C. § 103(a)) Combinations

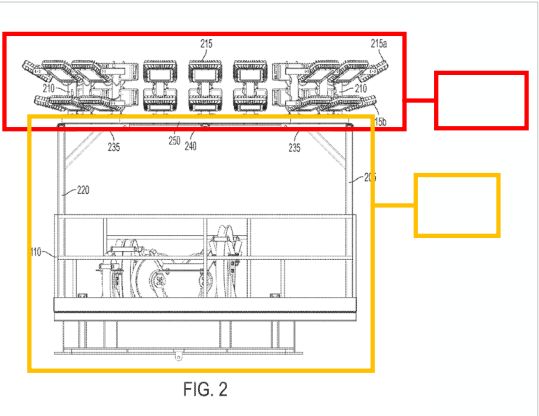
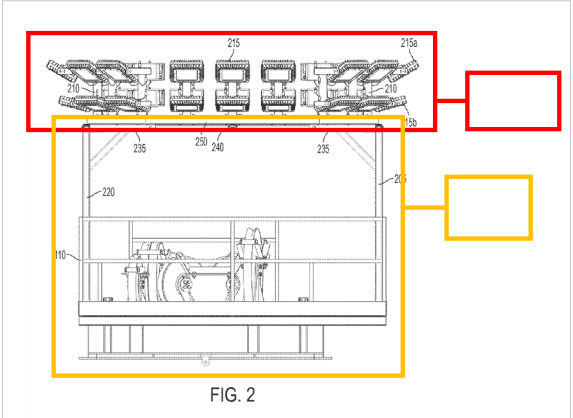
CHART 1 - Supplemental

The following patent, patent applications, and other publications are prior art under 35 U.S.C. §§ 102(a) and 103(a) with regard to both U.S. Patent No. 10,976,016 B2 (the '016 patent) and U.S. Patent No. 10,900,626 B2 (the '626 patent). As shown in the chart below each of the prior art references alone describe one or more elements of the asserted claims and to the extent any of the prior art references alone is missing a claim feature then it would readily be combined by a POSA with common knowledge and/or one or more of the other references described herein shown as having the claim feature to arrive at every element of the asserted claims. Prior to the asserted priority date of the '016 and '626 patents, light fixtures and other equipment described below have been attached to crown decks and/or handrails with, for example, mounting poles, brackets, and bolts. Furthermore, crown deck lighting with modular lights has been known in the prior art since well before 2018. A POSA would be prompted to make such combinations for the benefit of putting modular lighting on the crown deck of a rig. That is, a POSA would readily attach lights to a mounting pole on a crown deck and/or handrail because it would make the lights more accessible and easier to adjust. In addition or in the alternative, the use of mounting poles with brackets and/or bolts allows mounting or affixing the lights to differently configured, designed, or configured crown decks, including those with or without handrails. Thus, a POSA would combine these references for the obvious and predictable result of a crown deck with light fixtures mounted on poles and brackets. Furthermore, a POSA would be prompted to make such combinations for the benefit of putting modular lighting on the crown deck of a rig. Thus, the '016 patent and the '626 patents are invalid for being obvious.

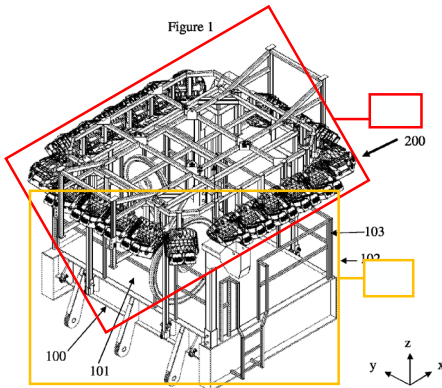
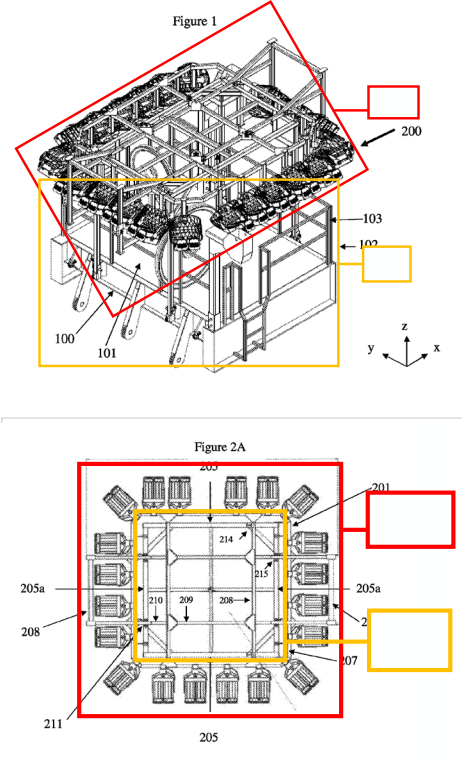
US 10,976,016 B2: Claims 1, 2, and 23		
1. A modular lighting system mounted on a rig, the modular lighting system comprising:		
No.	Prior Art	Disclosure
1.	US Patent No. 10,145,544 B2 (Issued: Dec. 4, 2018, filed February 26, 2015 and published as US2015/0184840 on July 2, 2015)	 “Lighting system 200 generally includes a lighting frame 205 (shown in FIG. 6, and described in more detail herein below), a plurality of light support posts 210, which are rotatable so as to allow each individual light fixture to swivel, arranged around a perimeter of the lighting frame and extending vertically such that one or more light fixtures 215, 215 a and/or 215 b, may be

U.S. Patent No. 10,976,016 – CLAIMS 1, 2, and 23

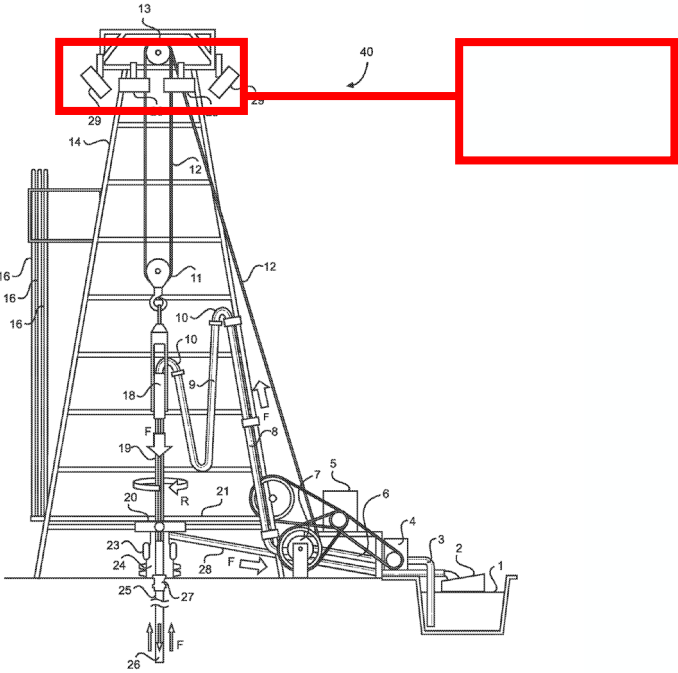
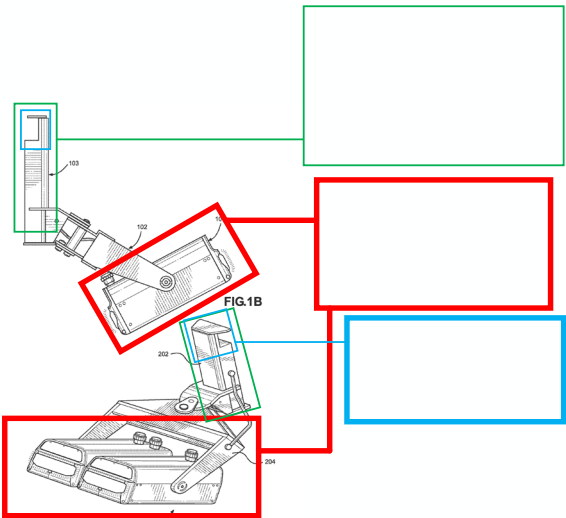
Obvious (35 U.S.C. § 103(a)) Combinations

		connected to each light support post 210 . Light fixture brackets 251 are also structured so as to allow each light fixture to tilt up and down. 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.”
2.	US Patent Publication 9,316,390 (Published: Apr. 19, 2016)	 FIG. 2 FIG. 2 illustrates a plurality of lights units attached to the crown deck of a rig.
3.	US Patent Application Publication 2015/0184840 A1 (Published: July 2, 2017)	 FIG. 2 FIG. 2 illustrates a plurality of lights units attached to the crown deck of a rig.

Obvious (35 U.S.C. § 103(a)) Combinations

4.	WO Patent Application 2018/020400 A1 (Published: Feb. 1, 2018)	 FIG. 1 illustrates a plurality of lights units attached to the crown deck of a rig.
5.	US Patent Application Publication 2019/0242218 (Published: Aug. 8, 2019)	 FIG. 1 and FIG. 2A illustrate a plurality of lights units attached to the crown deck of a rig.

Obvious (35 U.S.C. § 103(a)) Combinations

6.	WO Patent Application 2018/042348 A1 (Published: Mar. 8, 2018)	 FIG. 1A  FIG. 2 FIGS. 1A, 1B, and 2 illustrate a plurality of lights units attached to the crown deck of a rig.
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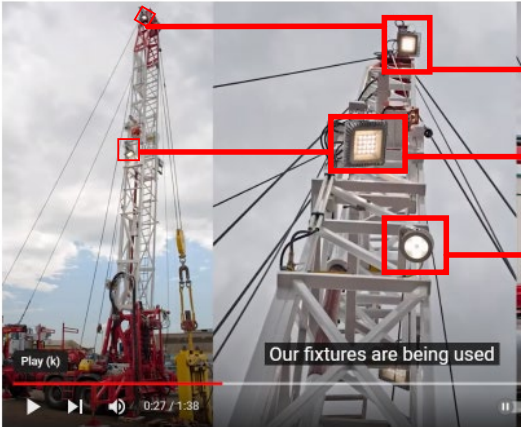
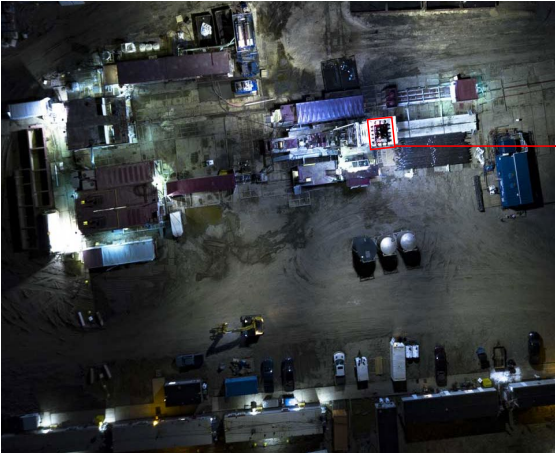
U.S. Patent No. 10,976,016 – CLAIMS 1, 2, and 23

Obvious (35 U.S.C. § 103(a)) Combinations

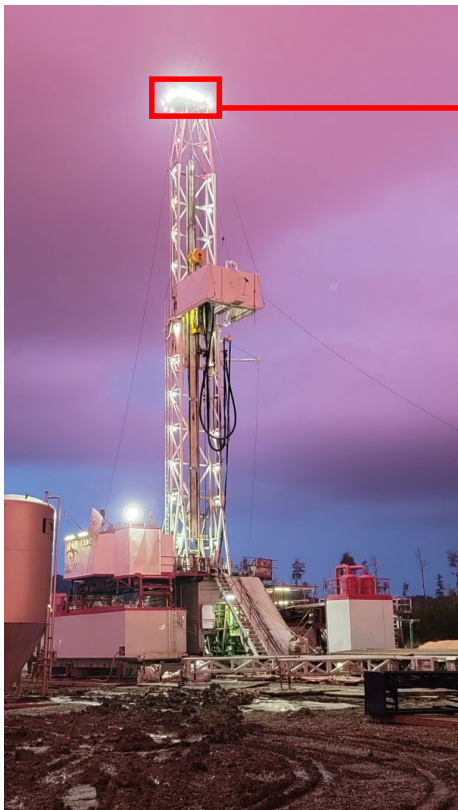
7.	US Patent No. 2,895,039 (Issued: July 14, 1959)	July 14, 1959 “The derrick light is adapted to be suspended from the derrick angle iron 1a by a bracket or yoke member 22, whose arcuate arms 23 and 24 are formed, at their ends, with side bearings 25, 25 that may be pivotally or rotatably secured to the ears 26, 26 on the casing of the light, as shown in Figures 1 and 2.” “The nut 33 is threaded on the free end of the bolt 28 to hold the bracket and cross-arm assembly in any desired horizontal position with respect to the derrick angle iron . . .”
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U.S. Patent No. 10,976,016 – CLAIMS 1, 2, and 23

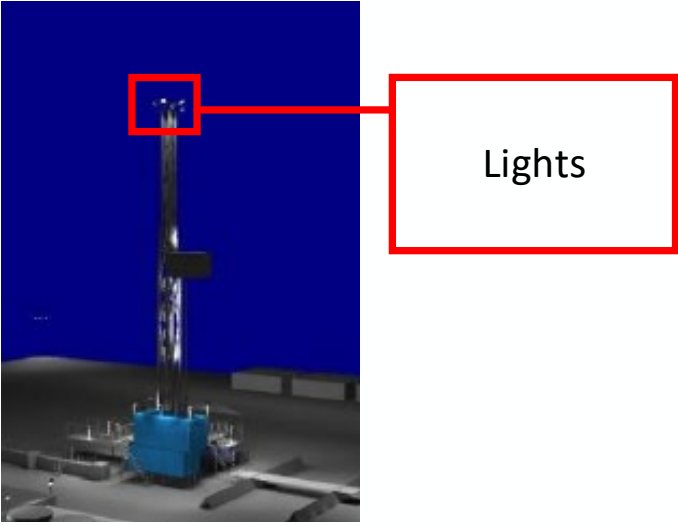
Obvious (35 U.S.C. § 103(a)) Combinations

8.	NEMALUX LED LIGHTING – COMPANY PROFILE (Youtube™) (Publicly Available at least as early as Jan 6, 2014)	 Our fixtures are being used Nemalux LED Lighting - Company Profile Nemalux LED Lighting 71 subscribers 3.7K views 9 years ago See the latest in LED lighting advancements from Nemalux http://www.nemalux.com as indu  Lights
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Obvious (35 U.S.C. § 103(a)) Combinations

		 Lights “Providing even illumination with relatively low max. to min. ratios for sites that are commonly re-organized with each move is best accomplished by supplementing the conventional approach with high output and optically controlled floodlights mounted at the top of the drilling rig and distributed evenly to deliver 360° coverage. Positioning floodlights at such an elevated mounting location reduces the potential for glare, increases visibility throughout the site as well as substantially reduces maintenance and rental costs.”
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Obvious (35 U.S.C. § 103(a)) Combinations

9.	Enform’s Lease Lighting Guideline (“Enform’s L.L.G.”) (Published: June 28, 2012)	 Figure F-7 (Page 29) Page 18 – “The tops of buildings and structures can be used as high points to mount additional lights for strategic task or movement areas or areas shadowed by main lighting fixtures. The higher lights can be elevated, the more effective they become at raising and evening out overall illuminance.” Page 20 – “Increase the Number of Attached Lighting Fixtures (Especially LED Lighting Fixtures). Consider adding LED lighting fixtures to trucks and other equipment. LED Lighting is very rugged and can survive vibration and cold, harsh temperatures.” Page 20 – “Mount Light Fixtures on Trucks and Equipment As High As Possible. When adding or adjusting light fixtures on trucks or equipment, select the highest point of the vehicle and aim the light downward to improve the lighting around the vehicle or equipment.” Page 25 – “Industrial LED Lighting. LED lighting solutions for industrial applications
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U.S. Patent No. 10,976,016 – CLAIMS 1, 2, and 23

Obvious (35 U.S.C. § 103(a)) Combinations

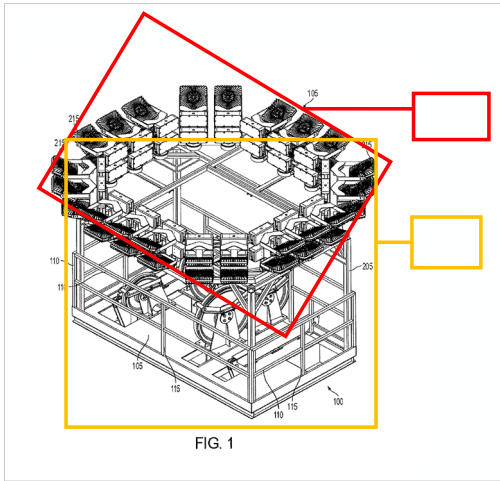
		continue to emerge on the market. These can provide a significant power saving while being more durable and resistant to cold weather than traditional metal halide bulbs. LED lighting solutions may eventually replace more permanent floodlight standards as well as provide a variety of portable lighting solutions, given they can provide significant light from battery power.” Page 25 – See Figures E-7, E-8, E-9 “LED floodlights” Page 26 – See FIGURE E-10 “Class 1, Div II LED designed for petrochemical industrial sites.”
10.	Apollo’s Offer to Sell its “Halo” Lighting System (Offered for Sale: October 18, 2017)	 Lights Apollo’s Halo Lighting System displays a rig with lights mounted on the crow deck for the purpose of illuminating a wellsite.

Obvious (35 U.S.C. § 103(a)) Combinations

11.	NABORS' PRIOR ART DRILLING RIGS (Offered for Sale; In Public Use; and Otherwise Available to the Public: <2003)	 Lights  Lights Nabors' Rig C-20 was manufactured @ 2003 and included at least four lights mounted on the crown of the drilling rig's mast for illuminating the wellsite below. Nabors' prior art crown lights as shown in were sold to Ensign in 2021. These rigs included lights mounted on the crown's structure including a plurality of mounting locations as desired by the drilling personnel; The
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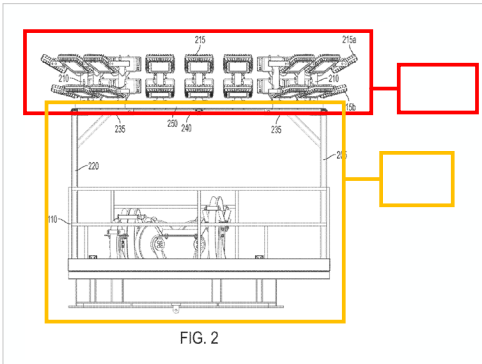
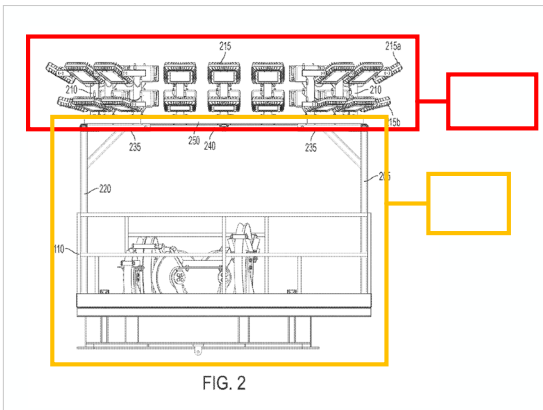
U.S. Patent No. 10,976,016 – CLAIMS 1, 2, and 23

Obvious (35 U.S.C. § 103(a)) Combinations

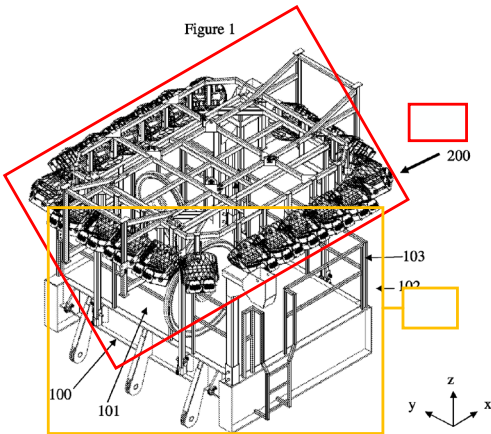
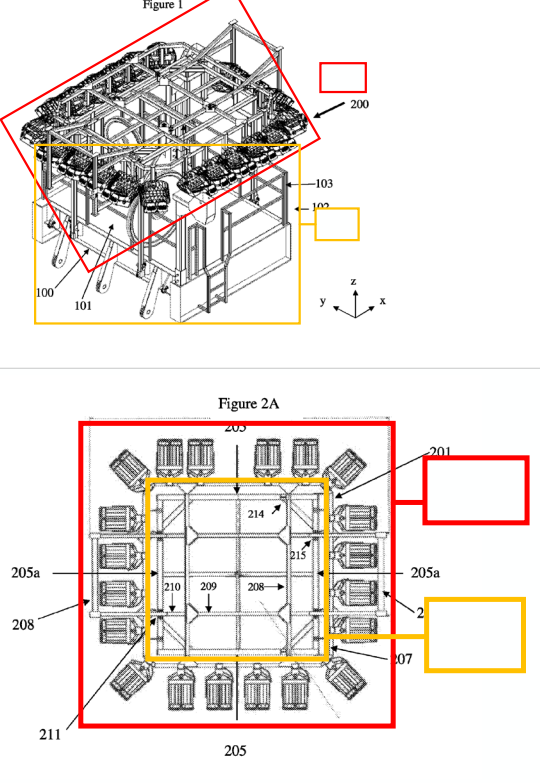
		rigs' crown included a framed structure including a plurality of vertical oriented elongate members extending above the crown deck. The lights were mounted on horizontal handrails mounted on the top of the vertical elongate members.
[a] a plurality of light units, each light unit separately attached to a crown deck of the rig, and each light unit comprising:		
No.	Prior Art	Disclosure
1.	US Patent No. 10,145,544 B2 (Published: Dec. 4, 2018)	 FIG. 1 “Lighting system 200 generally includes a lighting frame 205 (shown in FIG. 6, and described in more detail herein below), a plurality of light support posts 210, which are rotatable so as to allow each individual light fixture to swivel, arranged around a perimeter of the lighting frame and extending vertically such that one or more light fixtures 215, 215 a and/or 215 b, may be connected to each light support post 210. Light fixture brackets 251 are also structured so as to allow each light fixture to tilt up and down. 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.” US Patent No. 10,145,544 B2 is a continuation-in-part of U.S. patent application Ser. No. 14/093,097 filed Nov. 29, 2013 to which it claims priority. These patents have

U.S. Patent No. 10,976,016 – CLAIMS 1, 2, and 23

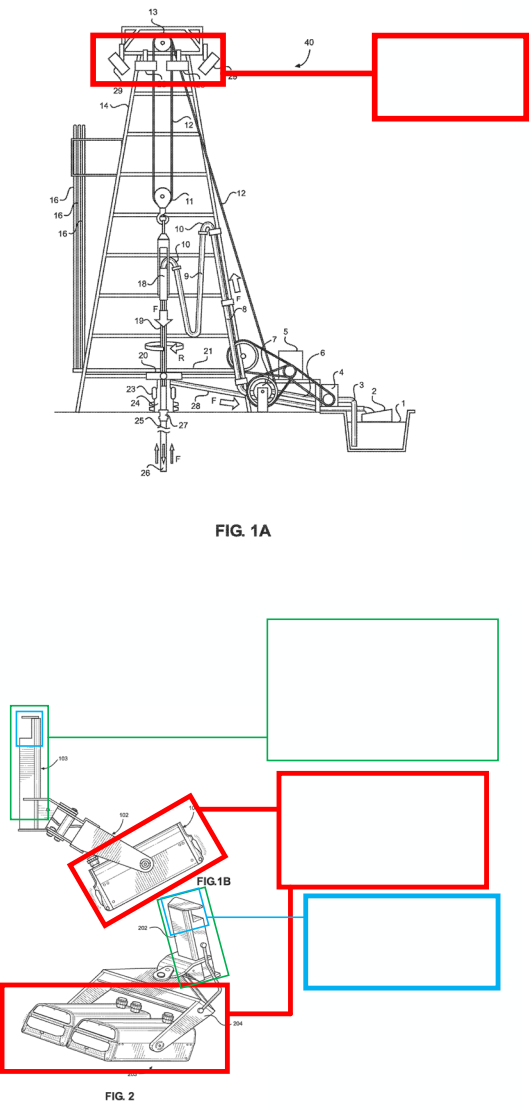
Obvious (35 U.S.C. § 103(a)) Combinations

		an identical disclosure as U.S. Patent No. 10,976,016 B2, and thus anticipates each of the claims. To the extent that US Patent No. 10,145,544 B2 does disclose each and every element of U.S. Patent No. 10,976,016 B2, a POSA would combine it with at least one of the following reference to arrive at the full disclosure for the predictable solution of light attached to poles on crown deck's handrail.
2.	US Patent Publication 9,316,390 (Published: Apr. 19, 2016)	 FIG. 2 illustrates a plurality of lights units attached to the crown deck of a rig.
3.	US Patent Application Publication 2015/0184840 A1 (Published: July 2, 2017)	 FIG. 2 illustrates a plurality of lights units attached to the crown deck of a rig.

Obvious (35 U.S.C. § 103(a)) Combinations

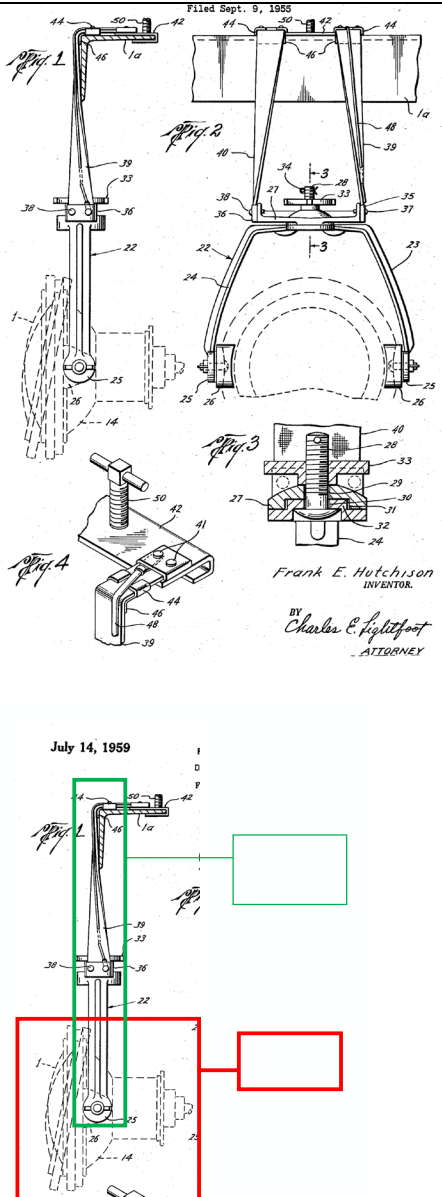
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5.	US Patent Application Publication 2019/0242218 (Published: Aug. 8, 2019)	 FIG. 1 and FIG. 2A illustrate a plurality of lights units attached to the crown deck of a rig.

Obvious (35 U.S.C. § 103(a)) Combinations

6.	WO Patent Application 2018/042348 A1 (Published: Mar. 8, 2018)	 FIGS. 1A, 1B, and 2 illustrate a plurality of lights units attached to the crown deck of a rig.
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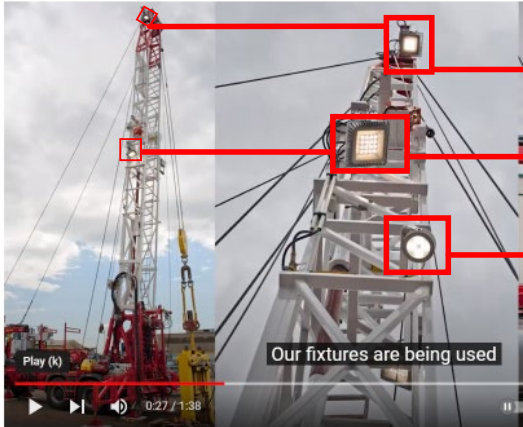
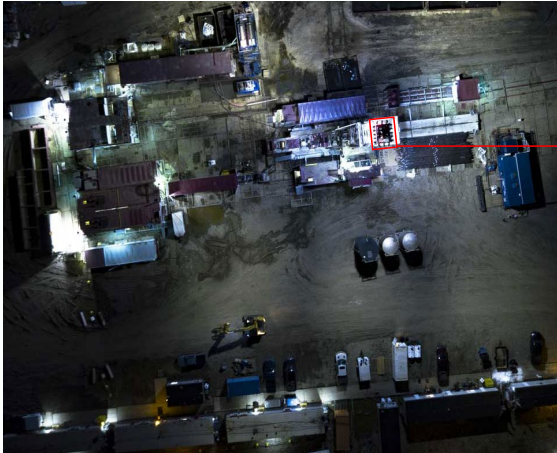
U.S. Patent No. 10,976,016 – CLAIMS 1, 2, and 23

Obvious (35 U.S.C. § 103(a)) Combinations

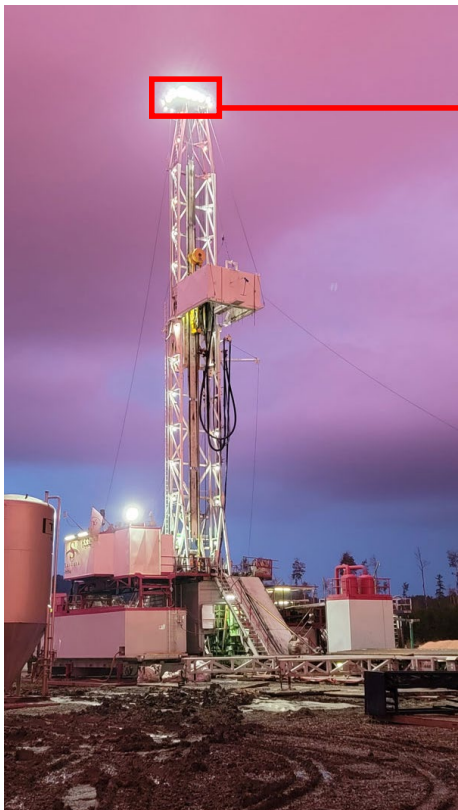
7.	US Patent No. 2,895,039 (Issued: July 14, 1959)	 July 14, 1959 “The derrick light is adapted to be suspended from the derrick angle iron 1a by a bracket or yoke member 22, whose arcuate arms 23 and 24 are formed, at their ends, with side bearings 25, 25 that may be pivotally or rotatably secured to the ears 26, 26 on the casing of the light, as shown in Figures 1 and 2.” “The nut 33 is threaded on the free end of the bolt 28 to hold the bracket and cross-arm assembly in any desired horizontal position with respect to the derrick angle iron . . .”
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U.S. Patent No. 10,976,016 – CLAIMS 1, 2, and 23

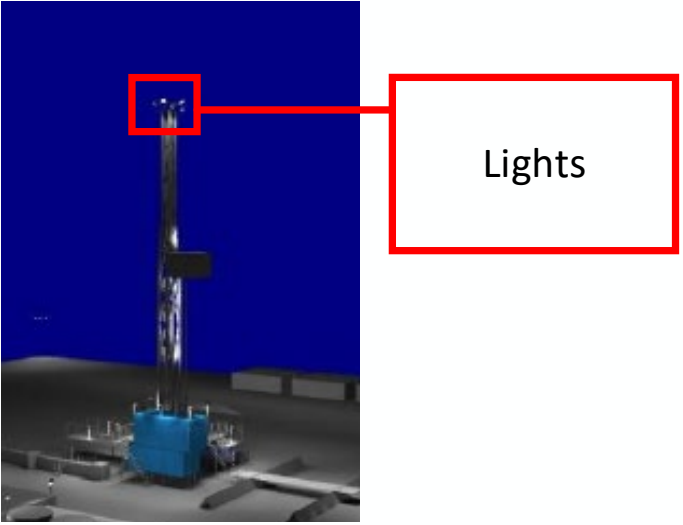
Obvious (35 U.S.C. § 103(a)) Combinations

8.	NEMALUX LED LIGHTING – COMPANY PROFILE (Youtube™) (Publicly Avail: Jan 6, 2014)	 Our fixtures are being used Nemalux LED Lighting - Company Profile Nemalux LED Lighting 71 subscribers 3.7K views 9 years ago See the latest in LED lighting advancements from Nemalux http://www.nemalux.com as indu  Lights
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Obvious (35 U.S.C. § 103(a)) Combinations

		 Lights “Providing even illumination with relatively low max. to min. ratios for sites that are commonly re-organized with each move is best accomplished by supplementing the conventional approach with high output and optically controlled floodlights mounted at the top of the drilling rig and distributed evenly to deliver 360° coverage. Positioning LED floodlights at such an elevated mounting location reduces the potential for glare, increases visibility throughout the site as well as substantially reduces maintenance and rental costs.”
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Obvious (35 U.S.C. § 103(a)) Combinations

9.	Enform’s Lease Lighting Guideline (“Enform’s L.L.G.”) (Published: June 28, 2012)	 Figure F-7 (Page 29) Page 18 – “The tops of buildings and structures can be used as high points to mount additional lights for strategic task or movement areas or areas shadowed by main lighting fixtures. The higher lights can be elevated, the more effective they become at raising and evening out overall illuminance.” Page 20 – “Increase the Number of Attached Lighting Fixtures (Especially LED Lighting Fixtures). Consider adding LED lighting fixtures to trucks and other equipment. LED Lighting is very rugged and can survive vibration and cold, harsh temperatures.” Page 20 – “Mount Light Fixtures on Trucks and Equipment As High As Possible. When adding or adjusting light fixtures on trucks or equipment, select the highest point of the vehicle and aim the light downward to improve the lighting around the vehicle or equipment.” Page 25 – “Industrial LED Lighting. LED lighting solutions for industrial applications
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Obvious (35 U.S.C. § 103(a)) Combinations

		continue to emerge on the market. These can provide a significant power saving while being more durable and resistant to cold weather than traditional metal halide bulbs. LED lighting solutions may eventually replace more permanent floodlight standards as well as provide a variety of portable lighting solutions, given they can provide significant light from battery power.” Page 25 – See Figures E-7, E-8, E-9 “LED floodlights” Page 26 – See FIGURE E-10 “Class 1, Div II LED designed for petrochemical industrial sites.”
10.	Apollo’s Offer to Sell its “Halo” Lighting System (Offered for Sale: October 18, 2017)	 The Halo lighting system illustrates a crown deck of a rig or derrick with lights illuminating a rig site.

U.S. Patent No. 10,976,016 – CLAIMS 1, 2, and 23

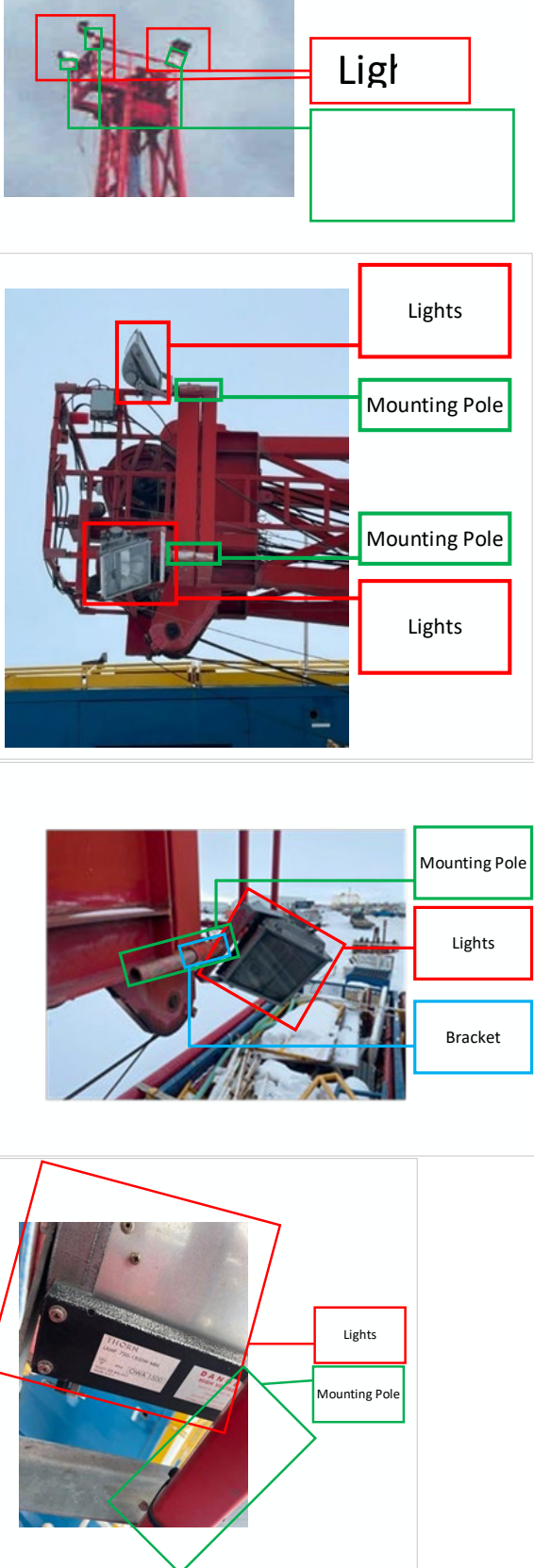
Obvious (35 U.S.C. § 103(a)) Combinations

11.	NABORS' PRIOR ART DRILLING RIGS (Offered for Sale; In Public Use; and Otherwise Available to the Public: <2003)	  The representative Nabors rigs illustrate a plurality of lights units attached to the crown deck of a rig.
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[b] a mounting pole;

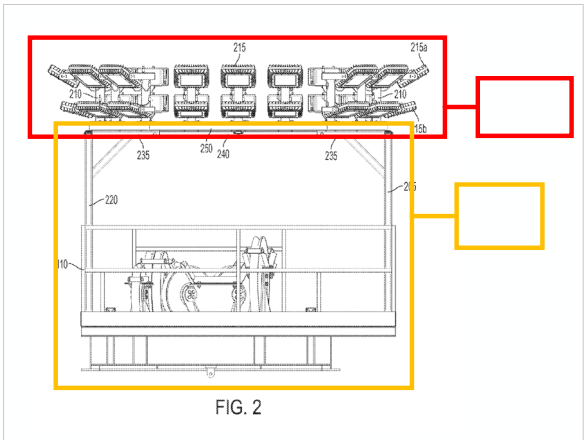
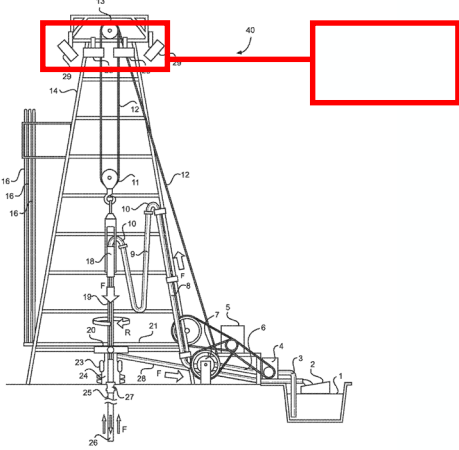
No.	Prior Art	Disclosure
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Obvious (35 U.S.C. § 103(a)) Combinations

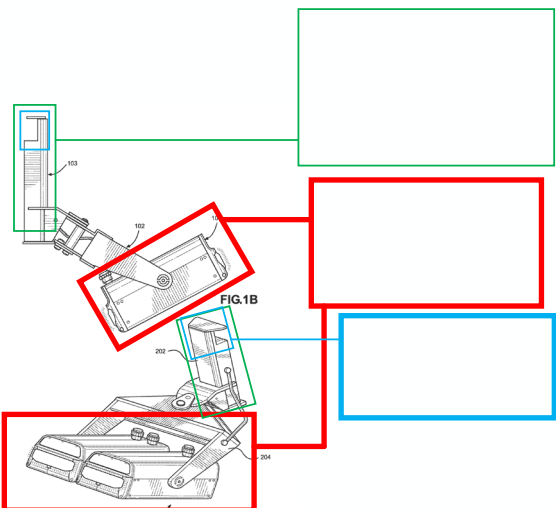
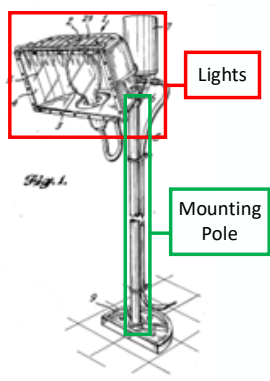
1.	NABORS' PRIOR ART DRILLING RIGS (Offered for Sale; In Public Use; and Otherwise Available to the Public: <2003)	 The third column contains four photographs of drilling rigs with callouts. The first photo shows a rig with two 'Lights' (red boxes) and a 'Mounting Pole' (green box). The second photo shows a rig with two 'Lights' (red boxes) and two 'Mounting Poles' (green boxes). The third photo shows a rig with a 'Mounting Pole' (green box), 'Lights' (red box), and a 'Bracket' (blue box). The fourth photo shows a rig with 'Lights' (red box) and a 'Mounting Pole' (green box).
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U.S. Patent No. 10,976,016 – CLAIMS 1, 2, and 23

Obvious (35 U.S.C. § 103(a)) Combinations

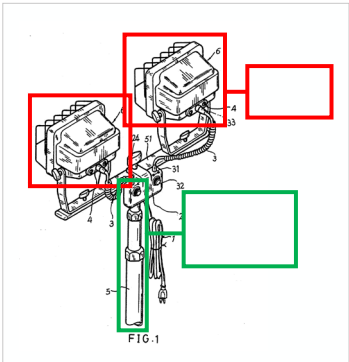
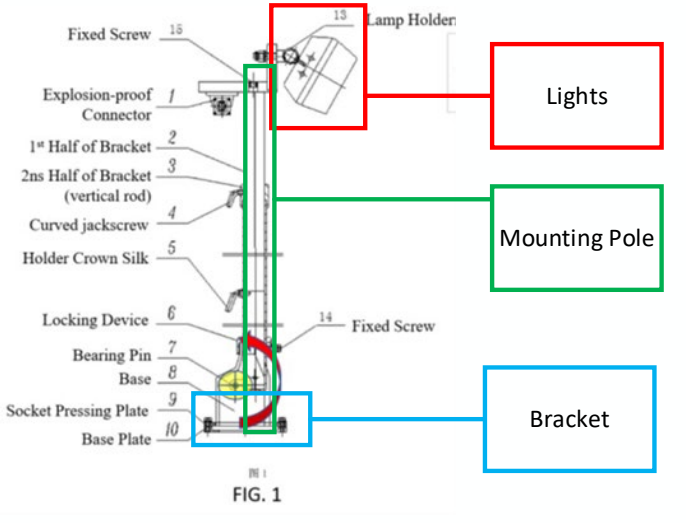
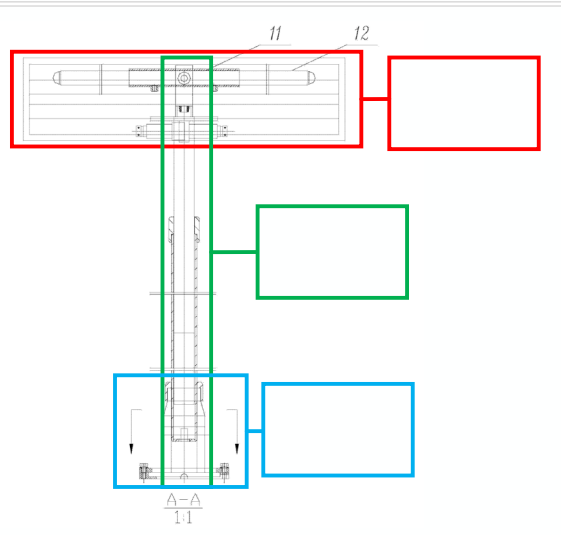
		The representative Nabors rigs illustrates a mounting pole attached to a light.
2.	US Patent Publication 9,316,390 (Published: Apr. 19, 2016)	 FIG. 2 FIG. 2 illustrates lights attached to mounting poles on a crown.
3.	WO Patent Application 2018/042348 A1 (Published: Mar. 8, 2018)	 FIG. 1A

Obvious (35 U.S.C. § 103(a)) Combinations

		 FIG. 2 FIGS. 1A and 1B illustrate lights attached to mounting poles on a crown deck.
4.	US Patent No. 4,937,717 (Published: Jun. 26, 1990)	 FIG. 1 illustrates a light attached to a mounting pole.

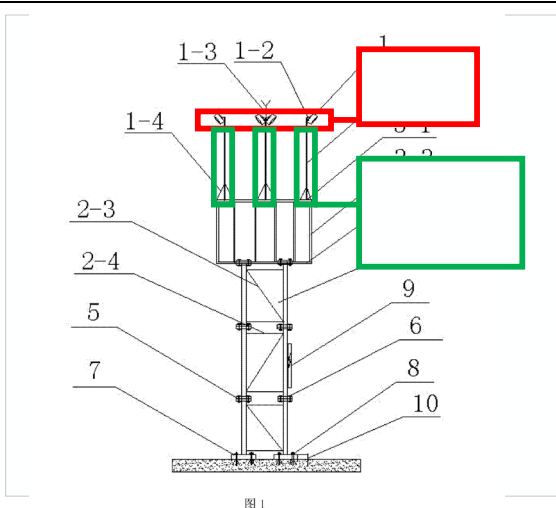
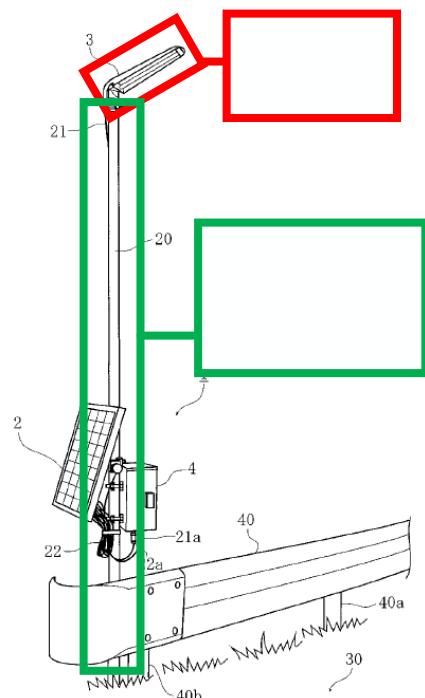
U.S. Patent No. 10,976,016 – CLAIMS 1, 2, and 23

Obvious (35 U.S.C. § 103(a)) Combinations

5.	US Patent No. 5,272,611 (Publication: Dec. 21, 1993)	 FIG. 1 illustrates a light attached to a mounting pole.
6.	Chinese Patent No. 2032-15413U, Entitled: Novel Lighting Lamp Support of Petroleum Drilling Machine Well Site (Published: Sept. 25, 2013)	 FIG. 1  FIG. 2

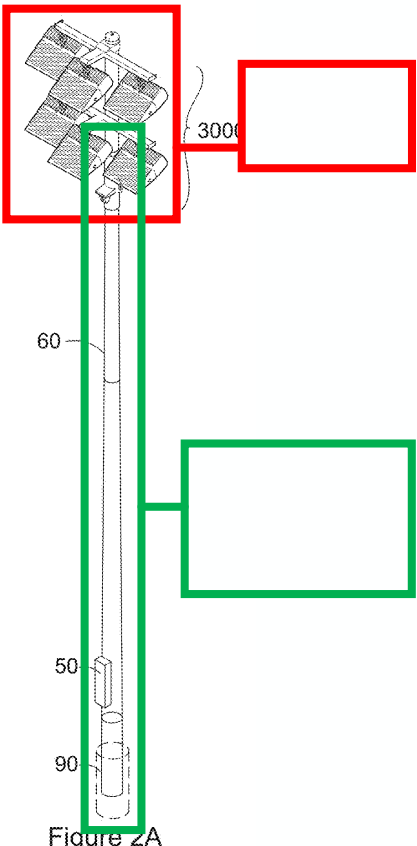
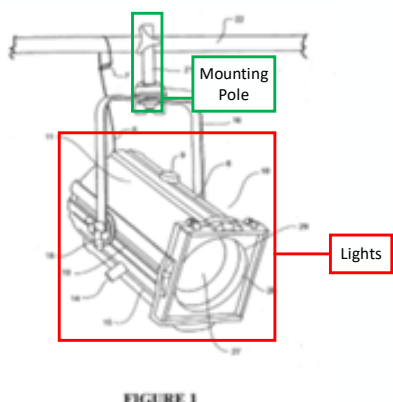
U.S. Patent No. 10,976,016 – CLAIMS 1, 2, and 23

Obvious (35 U.S.C. § 103(a)) Combinations

		FIGs. 1 and 2 illustrate a light attached to a mounting pole.
7.	Chinese Patent No. 203,336,518U; Entitled: Combined Type Metal Halide Lamp Overhead (Publication: Nov. 28, 2003)	 FIG. 1 illustrates a light attached to a mounting pole or lamp post.
8.	Japanese patent JP3202623U (Publication: Feb. 12, 2016)	 FIG. 4 illustrates a light attached to a mounting pole or post.

U.S. Patent No. 10,976,016 – CLAIMS 1, 2, and 23

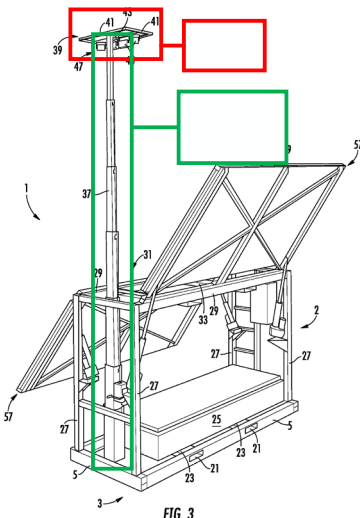
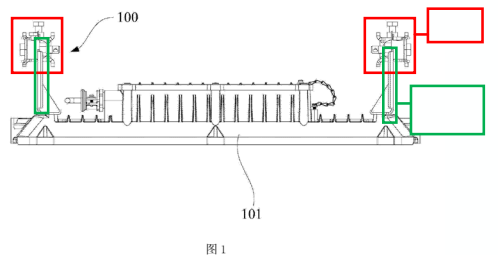
Obvious (35 U.S.C. § 103(a)) Combinations

9.	US Patent No. 10,356,886 B1 (Publication: July 16, 2019)	 FIG. 2A illustrates a light attached to a mounting pole or post.
10.	US Patent No. 20100157602 A1 (Publication: July 9, 2013)	 FIG. 1 illustrates a light attached to a mounting pole or post.

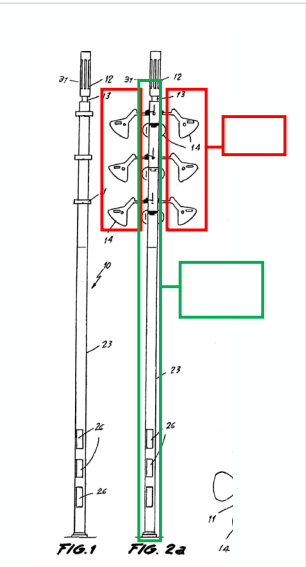
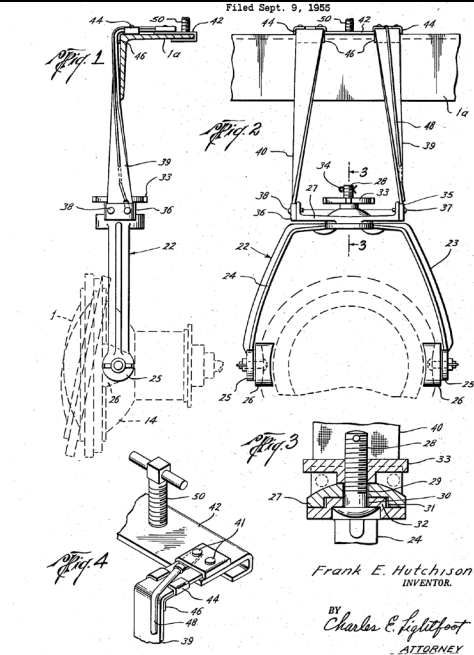
Obvious (35 U.S.C. § 103(a)) Combinations

11.	US Patent No. 20150313181 A1 (Published: Nov. 5, 2015)	FIG. 4A FIG. 4B illustrates a lamp or light connected to one or more mounting poles.
12.	Chinese Patent Application CN108980726A (Publication: Dec. 11, 2018 with filing date June 5, 2017)	FIG. 1 FIG. 1 illustrates a “kind of well site headlamp mounting bracket” including a light attached to a mounting pole or post.

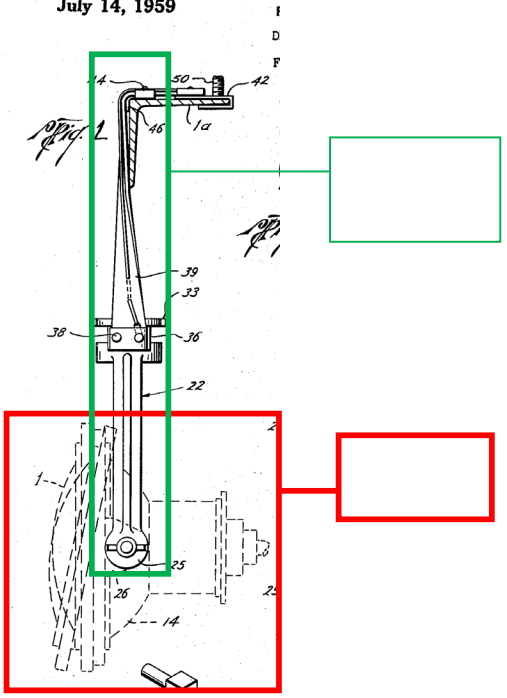
Obvious (35 U.S.C. § 103(a)) Combinations

13.	US Patent Application 20170141721A1 (Published: May 18, 2017)	 FIG. 3 FIG. 3 illustrates a light or lamp attached to a mounting pole.
14.	Chinese Patent Application CN104214723A (Published: Dec. 17, 2014)	 FIG. 1 FIG. 1 illustrates a light or light attached to a mounting pole.

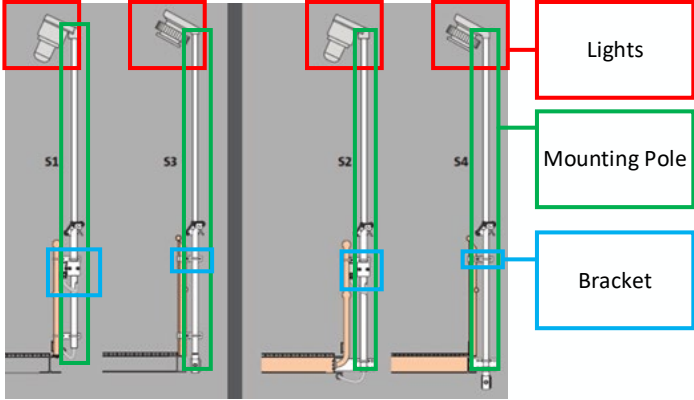
Obvious (35 U.S.C. § 103(a)) Combinations

15.	French patent No. FR2883067A3 (Published: Sept. 15, 2006)	 FIG. 1, 2a, and 2b illustrates one or more lights attached to one or more mounting poles.
16.	US Patent No. 2,895,039 (Issued: July 14, 1959)	 FIG. 1, 2, 3, and 4 illustrates one or more lights attached to one or more mounting poles.

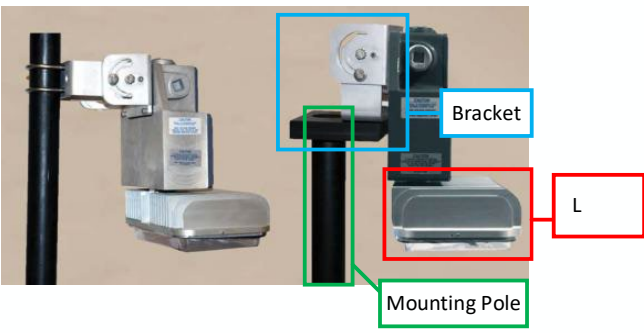
Obvious (35 U.S.C. § 103(a)) Combinations

		July 14, 1959  “The derrick light is adaptaed to be suspended from the derrick angle iron 1a by a bracket or yoke member 22, whose arcuate arms 23 and 24 are formed, at their ends, with side bearings 25, 25 that may be pivotally or rotatably secured to the ears 26, 26 on the casing of the light, as shown in Fiugres 1 and 2.”
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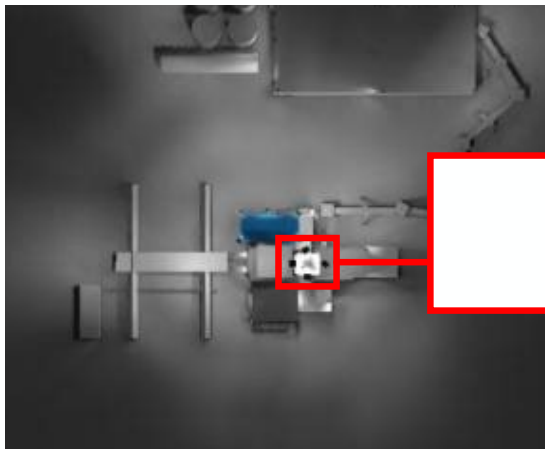
Obvious (35 U.S.C. § 103(a)) Combinations

		“The nut 33 is threaded on the free end of the bolt 28 to hold the bracket and cross-arm assembly in any desired horizontal position with respect to the derrick angle iron . . .”
17.	Swivelpole™ product catalogue (Published: March 2014)	 The diagram illustrates four Swivelpole™ units, labeled 51, 53, 52, and 54. Each unit consists of a vertical mounting pole with a horizontal bracket at the top. A light fixture is mounted on the bracket. The poles are shown in different configurations: some are straight, while others are angled. The brackets are shown in different positions, demonstrating the system's flexibility. Labels on the right side of the diagram identify the components: 'Lights' (red box), 'Mounting Pole' (green box), and 'Bracket' (blue box). “Swivelpole™ solves all your lighting maintenance and upgrade problems in one smart move.” “Join industry leaders worldwide and specify Swivelpole™ Oil & Gas ... End Users ... [Numerous oil and gas operators, e.g., Cenovus, Chevron, Conoco Philips, Marathon, etc.] “Correct installation means the walkway is not obstructed and the Swivelpole™ clears adjacent infrastructure to the side of, or behind, the guardrail. To achieve the correct installation you must consider both the luminaire mounting configuration and the orientation of the Safe Swivel™ joint in relation to the guardrail.”
18.	Enform’s Lease Lighting Guideline (“Enform’s L.L.G.”) (Published: June 28, 2012)	Page 18 – “The tops of buildings and structures can be used as high points to mount additional lights for strategic task or movement areas or areas shadowed by main lighting fixtures. The higher lights can be elevated, the more effective they become at raising and evening out overall illuminance.”

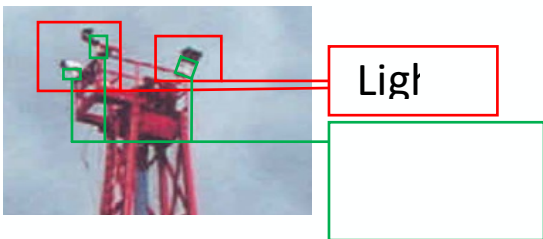
Obvious (35 U.S.C. § 103(a)) Combinations

	Page 20 – “Increase the Number of Attached Lighting Fixtures (Especially LED Lighting Fixtures). Consider adding LED lighting fixtures to trucks and other equipment. LED Lighting is very rugged and can survive vibration and cold, harsh temperatures.” Page 20 – “Mount Light Fixtures on Trucks and Equipment As High As Possible. When adding or adjusting light fixtures on trucks or equipment, select the highest point of the vehicle and aim the light downward to improve the lighting around the vehicle or equipment.” Page 25 – “Industrial LED Lighting. LED lighting solutions for industrial applications continue to emerge on the market. These can provide a significant power saving while being more durable and resistant to cold weather than traditional metal halide bulbs. LED lighting solutions may eventually replace more permanent floodlight standards as well as provide a variety of portable lighting solutions, given they can provide significant light from battery power.” Page 25 – See Figures E-7, E-8, E-9 “LED floodlights” Page 26 – See FIGURE E-10 “Class 1, Div II LED designed for petrochemical industrial sites.”  The diagram shows a side view of an LED floodlight assembly. A black vertical pole is labeled 'Mounting Pole' with a green box. A bracket is attached to the pole, labeled 'Bracket' with a blue box. A floodlight fixture is attached to the bracket, labeled 'L' with a red box. The floodlight fixture has a white housing and a black lens.
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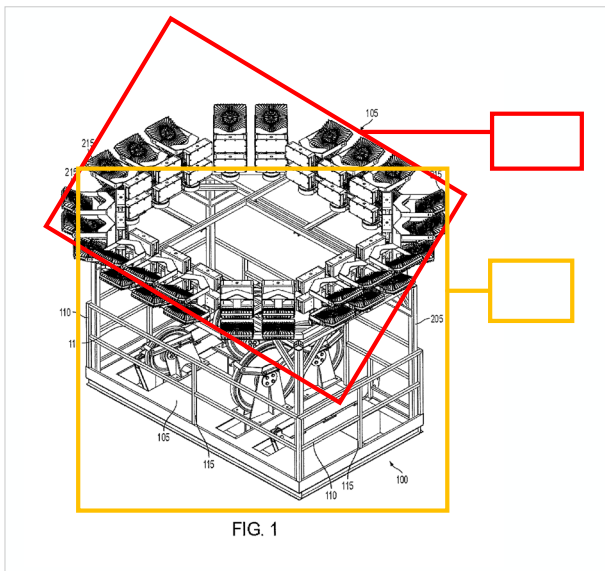
Obvious (35 U.S.C. § 103(a)) Combinations

		 The lighting guidelines illustrates lights attached to mounting poles designed for petrochemical industrial sites.
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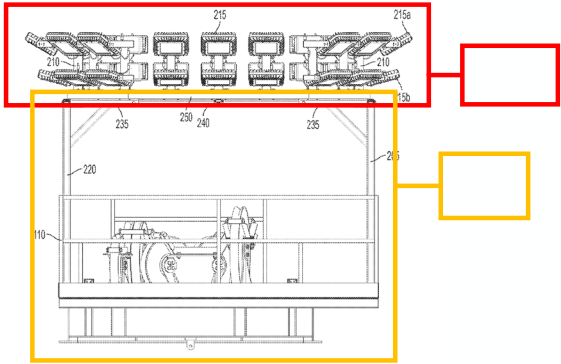
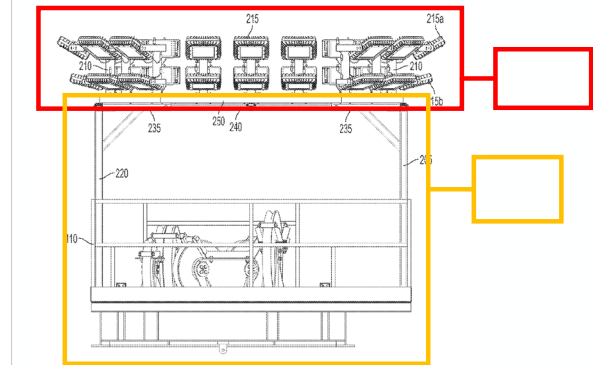
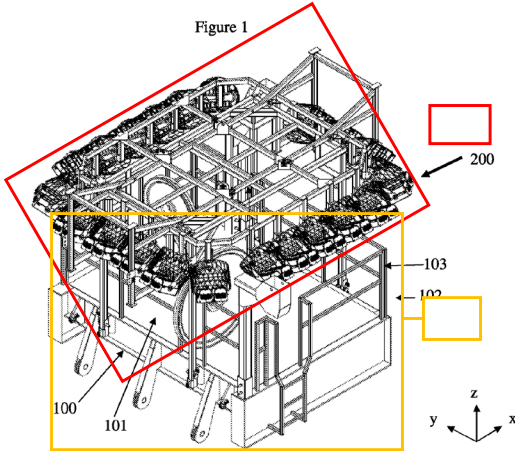
[c] a light fixture comprising one or more lights; and

No.	Prior Art	Description
1.	NABORS' PRIOR ART DRILLING RIGS (Offered for Sale; In Public Use; and Otherwise Available to the Public: <2003)	 Representative Nabors rig having a plurality of light units comprising one or more lights. Nabors' Rig C-20 was manufactured @ 2003 and included at least four lights mounted on the crown of the drilling rig's mast for illuminating the wellsite below.

Obvious (35 U.S.C. § 103(a)) Combinations

2.	US Patent No. 10,145,544 B2 (Published: Dec. 4, 2018)	 FIG. 1 “Lighting system 200 generally includes a lighting frame 205 (shown in FIG. 6, and described in more detail herein below), a plurality of light support posts 210, which are rotatable so as to allow each individual light fixture to swivel, arranged around a perimeter of the lighting frame and extending vertically such that one or more light fixtures 215, 215 a and/or 215 b, may be connected to each light support post 210. Light fixture brackets 251 are also structured so as to allow each light fixture to tilt up and down. 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.” US Patent No. 10,145,544 B2 is a continuation-in-part of U.S. patent application Ser. No. 14/093,097 filed Nov. 29, 2013 to which it claims priority. These patents have an identical disclosure as U.S. Patent No. 10,976,016 B2, and thus anticipates each of the claims. To the extent that US Patent No. 10,145,544 B2 does disclose each and every element of U.S. Patent No. 10,976,016 B2, a POSA would combine it with at least one of the following reference to arrive at the full disclosure for the predictable solution of light attached to poles on crown deck’s handrail.
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Obvious (35 U.S.C. § 103(a)) Combinations

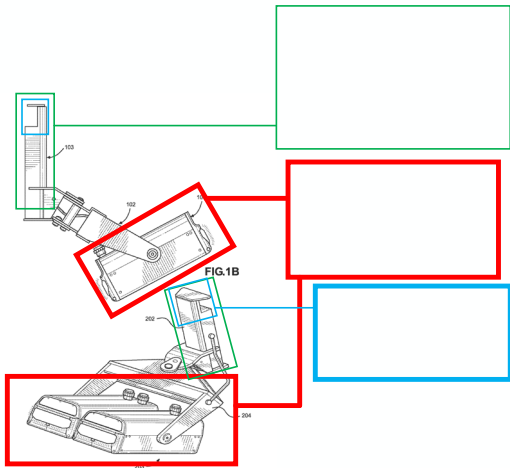
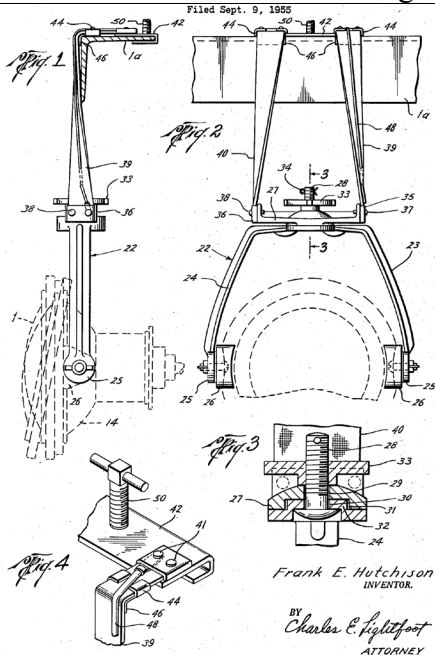
3.	US Patent Publication 9,316,390 (Published: Apr. 19, 2016)	 FIG. 2 FIG. 2 illustrates a plurality of lights units attached to the crown deck of a rig.
4.	US Patent Application Publication 2015/0184840 A1 (Published: July 2, 2017)	 FIG. 2 FIG. 2 illustrates a plurality of lights units attached to the crown deck of a rig.
5.	WO Patent Application 2018/020400 A1 (Published: Feb. 1, 2018)	 Figure 1 FIG. 1 illustrates a plurality of lights units attached to the crown deck of a rig.

U.S. Patent No. 10,976,016 – CLAIMS 1, 2, and 23

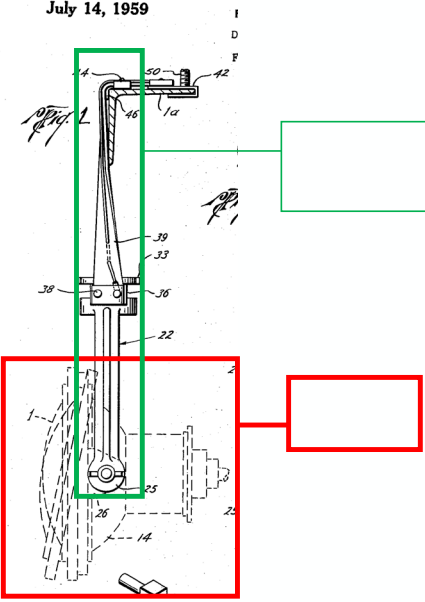
Obvious (35 U.S.C. § 103(a)) Combinations

6. US Patent Application Publication 2019/0242218 (Published: Aug. 8, 2019)	Figure 1 Figure 2A FIG. 1 and FIG. 2A illustrate a plurality of lights units attached to the crown deck of a rig.
7. WO Patent Application 2018/042348 A1 (Published: Mar. 8, 2018)	FIG. 1A

Obvious (35 U.S.C. § 103(a)) Combinations

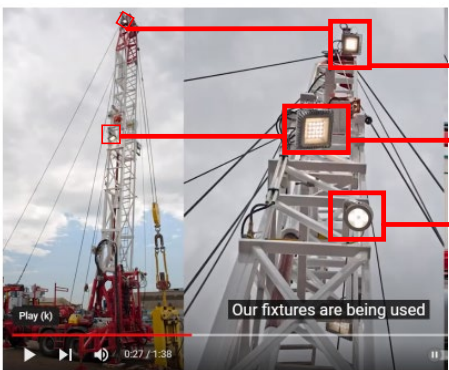
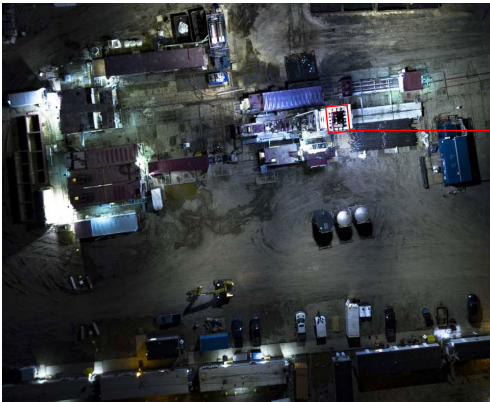
		 FIG. 2 FIGS. 1A, 1B, and 2 illustrate a plurality of lights units attached to the crown deck of a rig.
8.	US Patent No. 2,895,039 (Issued: July 14, 1959)	 Filed Sept. 9, 1955 Frank E. Hutchison INVENTOR BY Charles E. Lightfoot ATTORNEY

Obvious (35 U.S.C. § 103(a)) Combinations

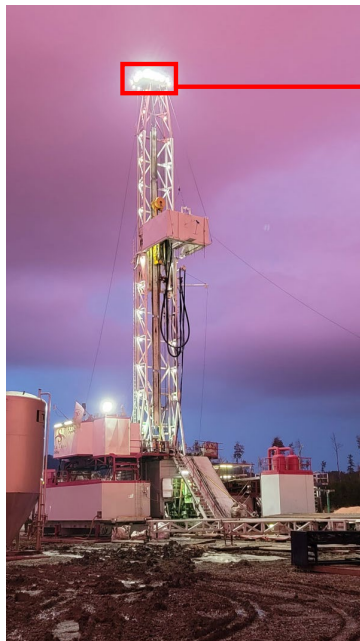
		July 14, 1959  “The derrick light is adapted to be suspended from the derrick angle iron 1a by a bracket or yoke member 22, whose arcuate arms 23 and 24 are formed, at their ends, with side bearings 25, 25 that may be pivotally or rotatably secured to the ears 26, 26 on the casing of the light, as shown in Figures 1 and 2.” “The nut 33 is threaded on the free end of the bolt 28 to hold the bracket and cross-arm assembly in any desired horizontal position with respect to the derrick angle iron
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U.S. Patent No. 10,976,016 – CLAIMS 1, 2, and 23

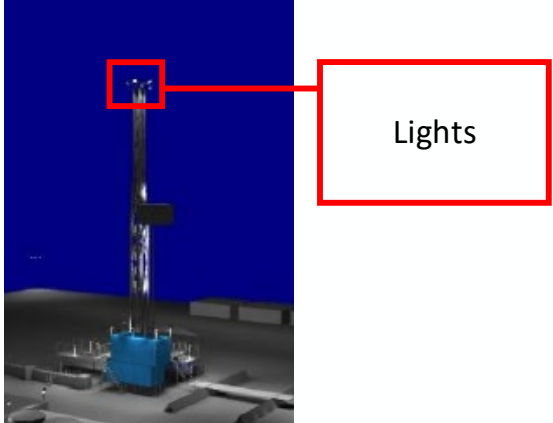
Obvious (35 U.S.C. § 103(a)) Combinations

9.	NEMALUX LED LIGHTING – COMPANY PROFILE (Youtube™) (Publicly Avail: Jan 6, 2014)	 Our fixtures are being used Nemalux LED Lighting - Company Profile Nemalux LED Lighting 71 subscribers 3.7K views 9 years ago See the latest in LED lighting advancements from Nemalux http://www.nemalux.com as indi 
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Obvious (35 U.S.C. § 103(a)) Combinations

		 Lights “Providing even illumination with relatively low max. to min. ratios for sites that are commonly re-organized with each move is best accomplished by supplementing the conventional approach with high output and optically controlled floodlights mounted at the top of the drilling rig and distributed evenly to deliver 360° coverage. Positioning LED floodlights at such an elevated mounting location reduces the potential for glare, increases visibility throughout the site as well as substantially reduces maintenance and rental costs.”
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Obvious (35 U.S.C. § 103(a)) Combinations

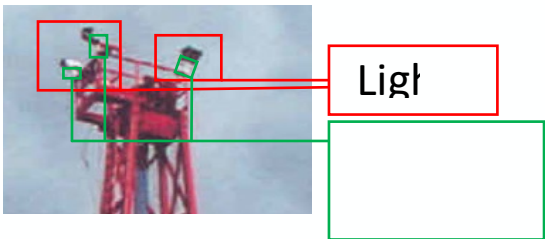
10.	Enform's Lease Lighting Guideline ("Enform's L.L.G.") (Published: June 28, 2012)	 Figure F-7 (Page 29) Page 18 – “The tops of buildings and structures can be used as high points to mount additional lights for strategic task or movement areas or areas shadowed by main lighting fixtures. The higher lights can be elevated, the more effective they become at raising and evening out overall illuminance.” Page 20 – “Increase the Number of Attached Lighting Fixtures (Especially LED Lighting Fixtures). Consider adding LED lighting fixtures to trucks and other equipment. LED Lighting is very rugged and can survive vibration and cold, harsh temperatures.” Page 20 – “Mount Light Fixtures on Trucks and Equipment As High As Possible. When adding or adjusting light fixtures on trucks or equipment, select the highest point of the vehicle and aim the light downward to improve the lighting around the vehicle or equipment.” Page 25 – “Industrial LED Lighting. LED lighting solutions for industrial applications
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U.S. Patent No. 10,976,016 – CLAIMS 1, 2, and 23

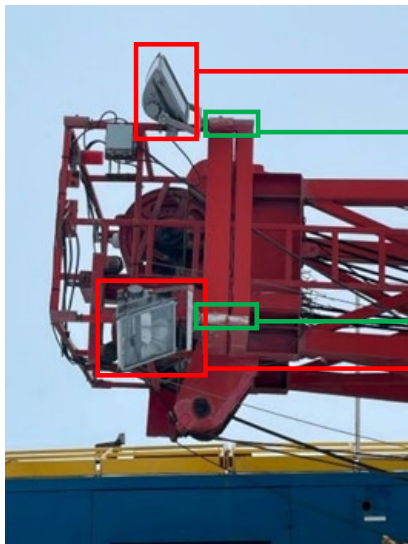
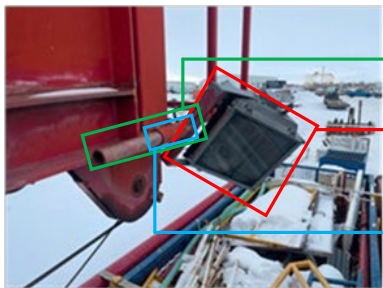
Obvious (35 U.S.C. § 103(a)) Combinations

		continue to emerge on the market. These can provide a significant power saving while being more durable and resistant to cold weather than traditional metal halide bulbs. LED lighting solutions may eventually replace more permanent floodlight standards as well as provide a variety of portable lighting solutions, given they can provide significant light from battery power.” Page 25 – See Figures E-7, E-8, E-9 “LED floodlights” Page 26 – See FIGURE E-10 “Class 1, Div II LED designed for petrochemical industrial sites.”
11.	Apollo’s Offer to Sell its “Halo” Lighting System (Offered for Sale: October 18, 2017)	

[d] a bracket configured to attach the mounting pole to the crown deck of the rig.

No.	Prior Art	Description
1.	NABORS’ PRIOR ART DRILLING RIGS (Offered for Sale; In Public Use; and Otherwise Available to the Public: <2003)	

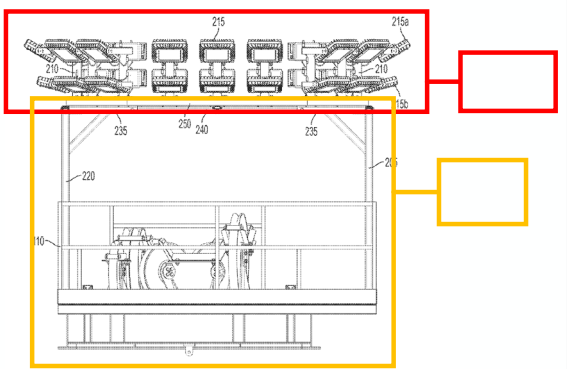
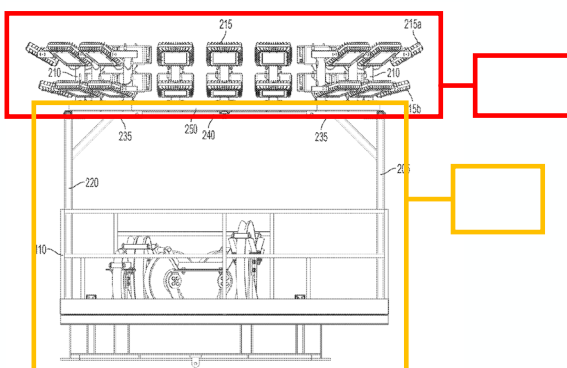
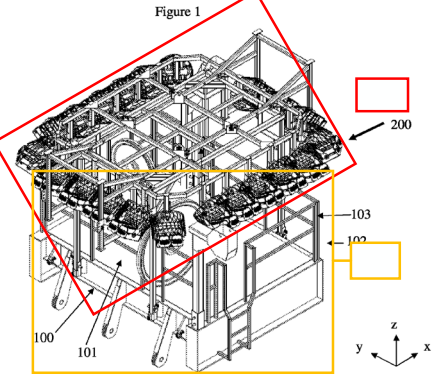
Obvious (35 U.S.C. § 103(a)) Combinations

		 Lights Mounting Pole Mounting Pole Lights  Mounting Pole Lights Bracket  Lights Mounting Pole Representative Nabors rig having a plurality of a light unit each attached to a mounting pole connect to crown deck via a bracket.
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Obvious (35 U.S.C. § 103(a)) Combinations

2.	US Patent No. 10,145,544 B2 (Published: Dec. 4, 2018)	FIG. 1 “Lighting system 200 generally includes a lighting frame 205 (shown in FIG. 6, and described in more detail herein below), a plurality of light support posts 210, which are rotatable so as to allow each individual light fixture to swivel, arranged around a perimeter of the lighting frame and extending vertically such that one or more light fixtures 215, 215 a and/or 215 b, may be connected to each light support post 210. Light fixture brackets 251 are also structured so as to allow each light fixture to tilt up and down. 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.” US Patent No. 10,145,544 B2 is a continuation-in-part of U.S. patent application Ser. No. 14/093,097 filed Nov. 29, 2013 to which it claims priority. These patents have an identical disclosure as U.S. Patent No. 10,976,016 B2, and thus anticipates each of the claims. To the extent that US Patent No. 10,145,544 B2 does disclose each and every element of U.S. Patent No. 10,976,016 B2, a POSA would combine it with at least one of the following reference to arrive at the full disclosure for the predictable solution of light attached to poles on crown deck’s handrail.
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Obvious (35 U.S.C. § 103(a)) Combinations

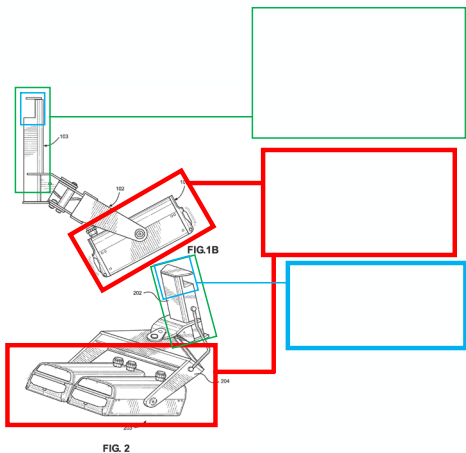
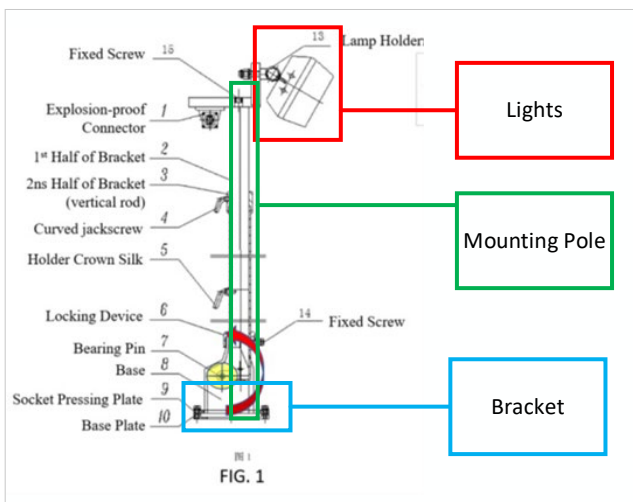
3.	US Patent Publication 9,316,390 (Published: Apr. 19, 2016)	 FIG. 2 FIG. 2 illustrates a plurality of lights units attached to the crown deck of a rig.
4.	US Patent Application Publication 2015/0184840 A1 (Published: July 2, 2017)	 FIG. 2 FIG. 2 illustrates a plurality of lights units attached to the crown deck of a rig.
5.	WO Patent Application 2018/020400 A1 (Published: Feb. 1, 2018)	 FIG. 1 FIG. 1 illustrates a plurality of lights units attached to the crown deck of a rig.

U.S. Patent No. 10,976,016 – CLAIMS 1, 2, and 23

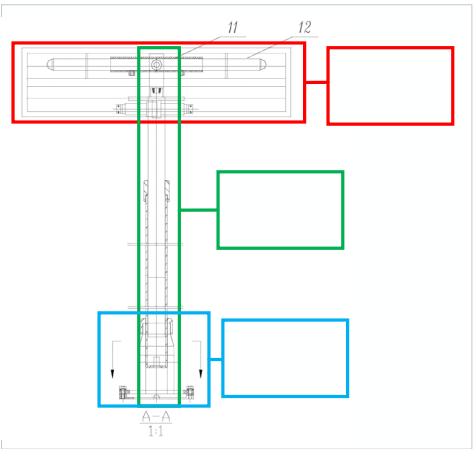
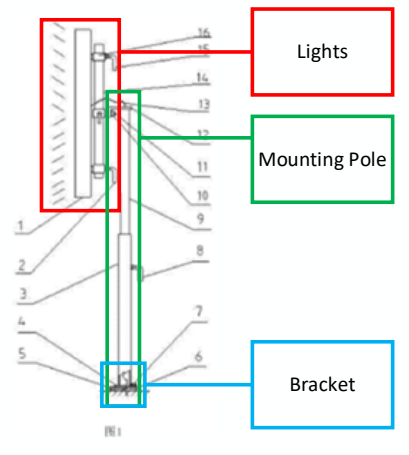
Obvious (35 U.S.C. § 103(a)) Combinations

6.	US Patent Application Publication 2019/0242218 (Published: Aug. 8, 2019)	FIG. 1 and FIG. 2A illustrate a plurality of lights units attached to the crown deck of a rig.
7.	WO Patent Application 2018/042348 A1 (Published: Mar. 8, 2018)	FIG. 1A

Obvious (35 U.S.C. § 103(a)) Combinations

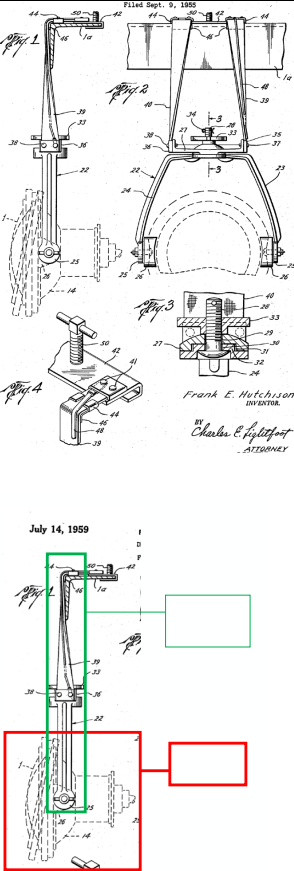
		 FIGS. 1A, 1B, and 2 illustrate a plurality of lights units attached to the crown deck of a rig.
8.	Chinese Patent No. 2032-15413U, Entitled: Novel Lighting Lamp Support of Petroleum Drilling Machine Well Site (Published: Sept. 25, 2013)	 FIG. 1

Obvious (35 U.S.C. § 103(a)) Combinations

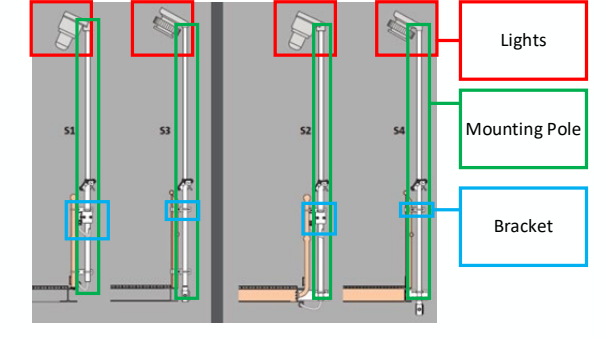
		 FIGS. 1 and 2 illustrate a light attached to a mounting pole.
9.	Chinese Patent Application CN108980726A (Publication: Dec. 11, 2018 with filing date of June 5, 2017)	 FIG. 1 illustrates a “kind of well site headlamp mounting bracket” including a light attached to a mounting pole or post.

U.S. Patent No. 10,976,016 – CLAIMS 1, 2, and 23

Obvious (35 U.S.C. § 103(a)) Combinations

10.	US Patent No. 2,895,039 (Issued: July 14, 1959)	 “The derrick light is adaptaed to be suspended from the derrick angle iron 1a by a bracket or yoke member 22, whose arcuate arms 23 and 24 are formed, at their ends, with side bearings 25, 25 that may be pivotally or rotatably secured to the ears 26, 26 on the casing of the light, as shown in Fiugres 1 and 2.” “The nut 33 is threaded on the free end of the bolt 28 to hold the bracket and cross-arm assembly in any desired horizontal position with respect to the derrick angle iron . . .”
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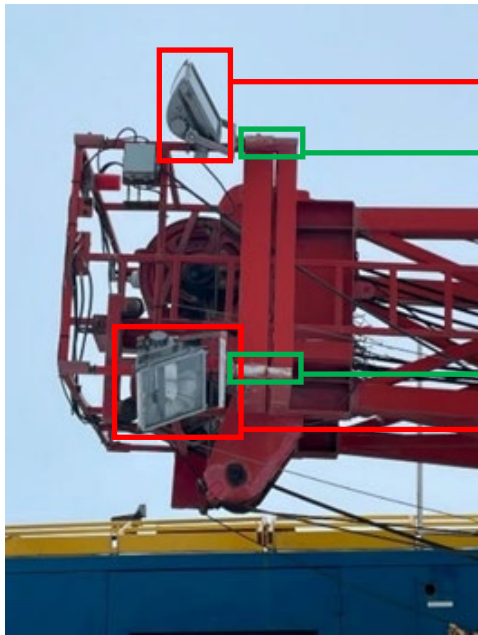
Obvious (35 U.S.C. § 103(a)) Combinations

11.	Swivelpole™ product catalogue (Published: March 2014)	 “Swivelpole™ solves all your lighting maintenance and upgrade problems in one smart move.” See NABORS_5579; “Join industry leaders worldwide and specify Swivelpole™ Oil & Gas ... End Users ... [Numerous oil and gas operators, e.g., Cenovus, Chevron, Conoco Philips, Marathon, etc.] “Correct installation means the walkway is not obstructed and the Swivelpole™ clears adjacent infrastructure to the side of, or behind, the guardrail. To achieve the correct installation you must consider both the luminaire mounting configuration and the orientation of the Safe Swivel™ joint in relation to the guardrail.”
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2. The lighting system of claim 1, wherein the bracket is connected to the crown deck of the rig using bolts.

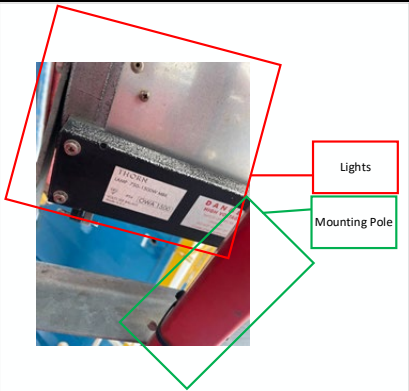
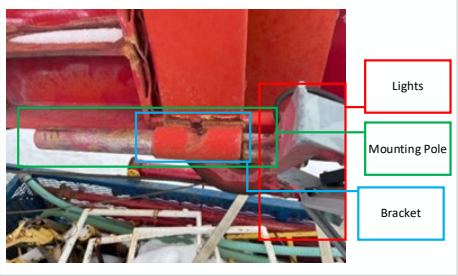
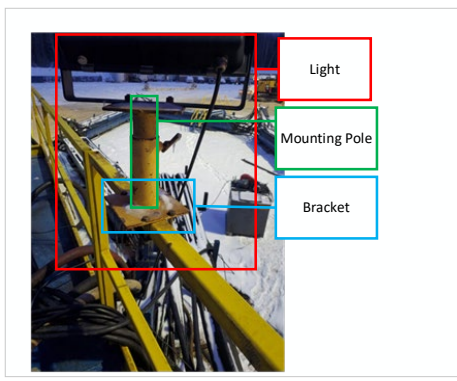
No.	Prior Art	Description
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Obvious (35 U.S.C. § 103(a)) Combinations

1.	NABORS' PRIOR ART DRILLING RIGS (Offered for Sale; In Public Use; and Otherwise Available to the Public: <2003)	 Lights Mounting Pole Mounting Pole Lights
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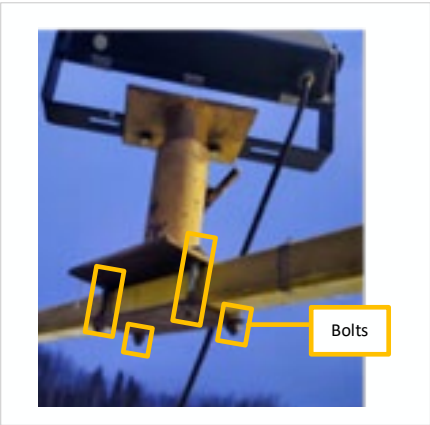
U.S. Patent No. 10,976,016 – CLAIMS 1, 2, and 23

Obvious (35 U.S.C. § 103(a)) Combinations

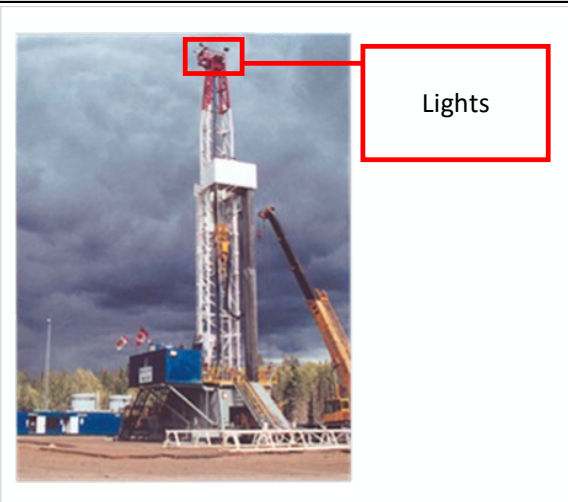
		 This image shows a close-up of a light fixture mounted on a pole. A red box highlights the light fixture, and a green box highlights the mounting pole. Labels 'Lights' and 'Mounting Pole' are present.	
		 This image shows a light fixture mounted on a pole. A red box highlights the light fixture, a green box highlights the mounting pole, and a blue box highlights a bracket. Labels 'Lights', 'Mounting Pole', and 'Bracket' are present.	
		 This image shows a light fixture mounted on a pole. A red box highlights the light fixture, a green box highlights the mounting pole, and a blue box highlights a bracket. Labels 'Light', 'Mounting Pole', and 'Bracket' are present.	

U.S. Patent No. 10,976,016 – CLAIMS 1, 2, and 23

Obvious (35 U.S.C. § 103(a)) Combinations

		 The Nabors rig illustrates a light on a mounting pole and a bracket wherein the bracket is connected to the crown deck via one or more bolts.
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23. A rig comprising:

No.	Prior Art	Description
1.	NABORS' PRIOR ART DRILLING RIGS (Offered for Sale; In Public Use; and Otherwise Available to the Public: <2003)	

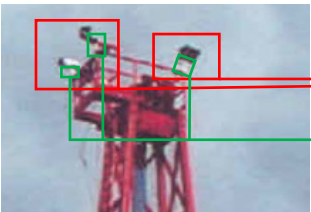
[a] a derrick;

No.	Prior Art	Description
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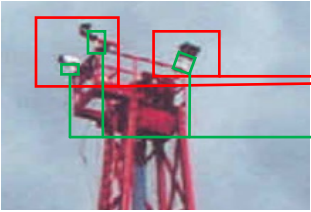
Obvious (35 U.S.C. § 103(a)) Combinations

1.	NABORS' PRIOR ART DRILLING RIGS (Offered for Sale; In Public Use; and Otherwise Available to the Public: <2003)		
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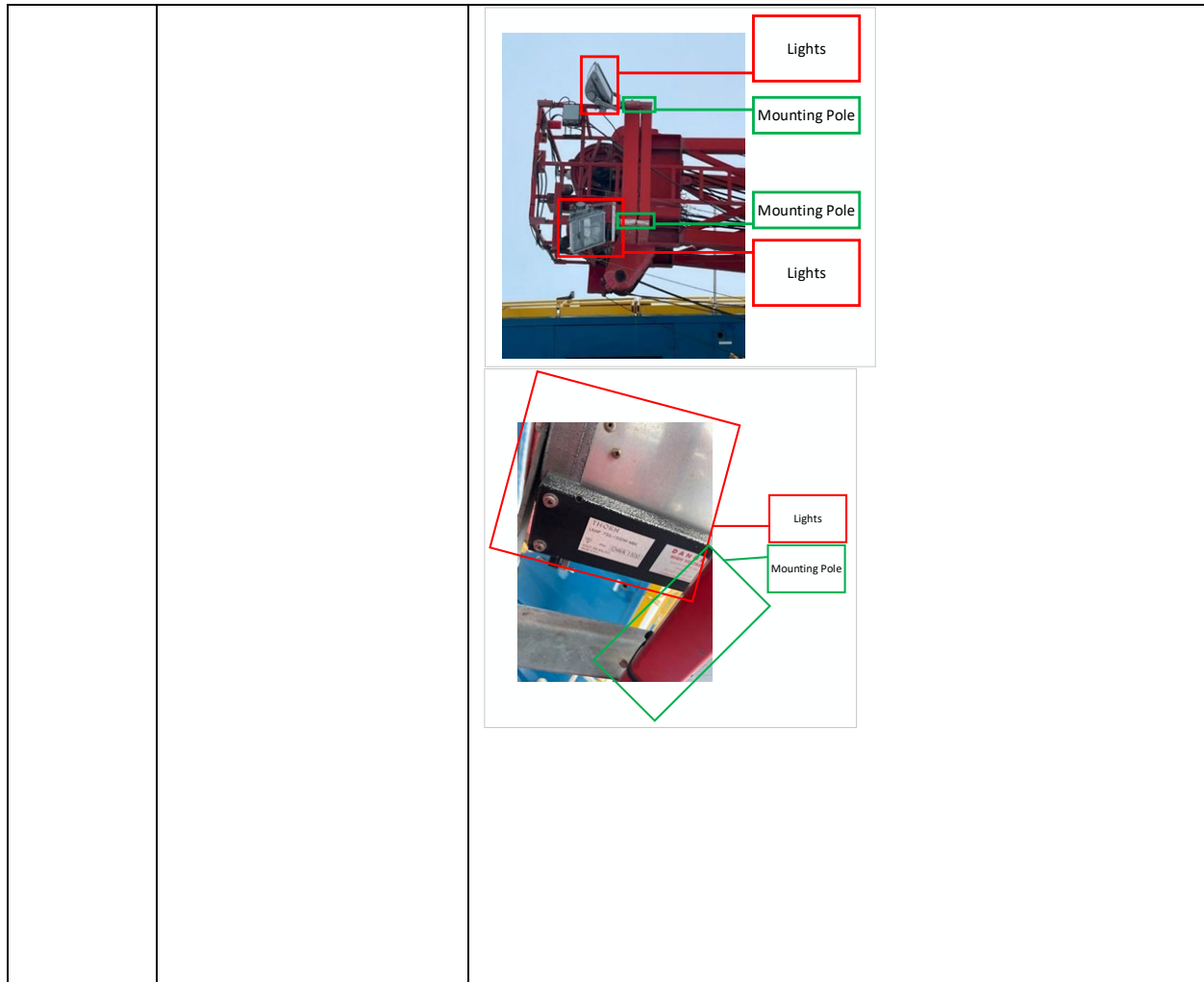
[b] a crown deck at the top of the derrick; and

No.	Prior Art	Description
1.	NABORS' PRIOR ART DRILLING RIGS (Offered for Sale; In Public Use; and Otherwise Available to the Public: <2003)	

[c] a plurality of light units, each light unit separately attached to the crown deck, each light unit comprising:

No.	Prior Art	Description
1.	NABORS' PRIOR ART DRILLING RIGS (Offered for Sale; In Public Use; and Otherwise Available to the Public: <2003)	

Obvious (35 U.S.C. § 103(a)) Combinations

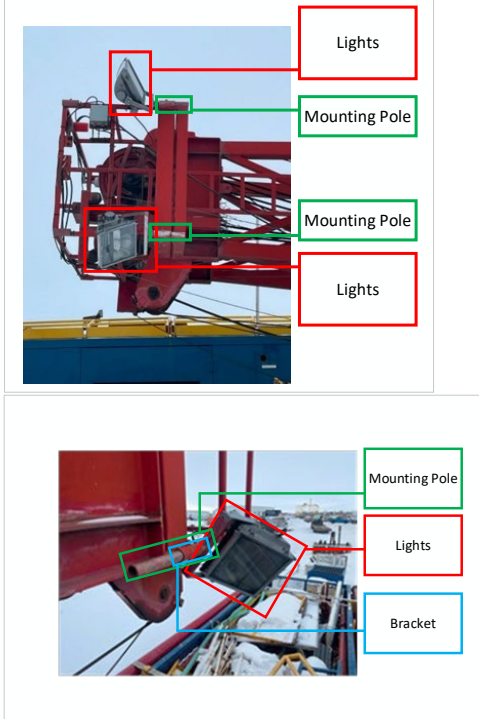
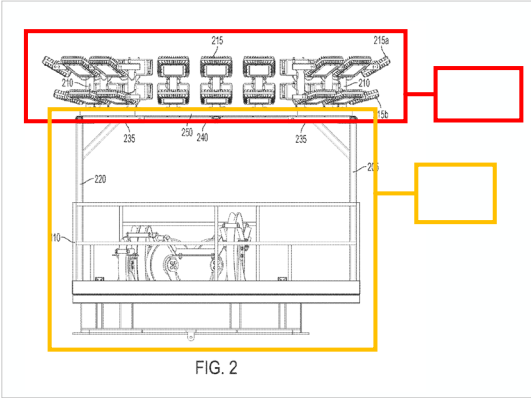


[d] a mounting pole, wherein each light unit comprises a separate mounting pole, such that the system comprises a plurality of mounting poles; and

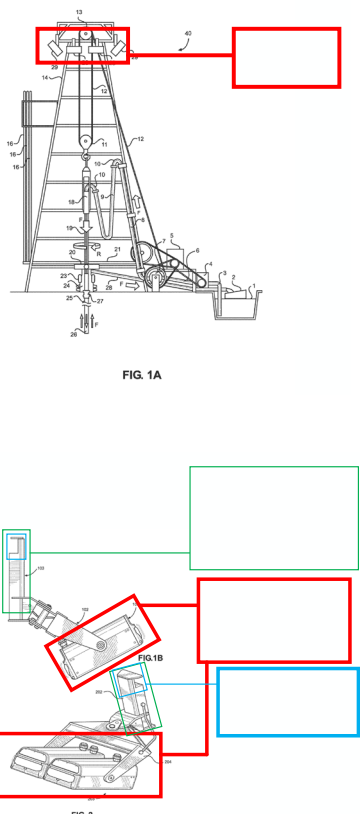
No.	Prior Art	Description
1.	NABORS' PRIOR ART DRILLING RIGS (Offered for Sale; In Public Use; and Otherwise Available to the Public: <2003)	

U.S. Patent No. 10,976,016 – CLAIMS 1, 2, and 23

Obvious (35 U.S.C. § 103(a)) Combinations

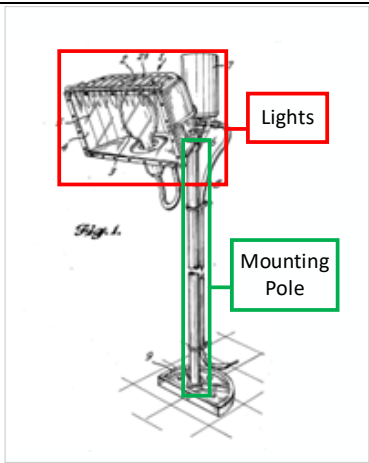
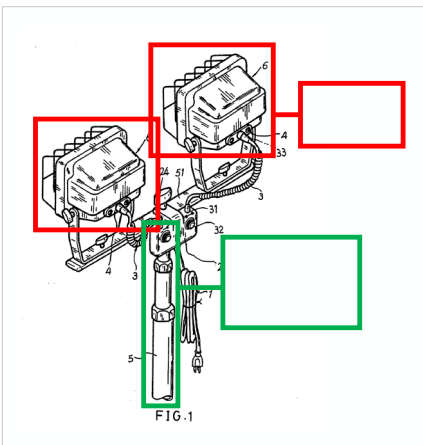
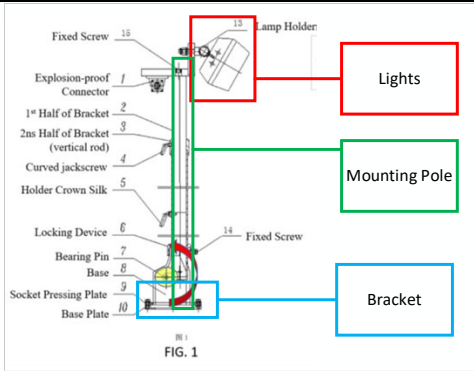
		 The representative Nabors rigs illustrates a mounting pole attached to a light.
2.	US Patent Publication 9,316,390 (Published: Apr. 19, 2016)	 FIG. 2 illustrates lights attached to mounting poles on a crown.

Obvious (35 U.S.C. § 103(a)) Combinations

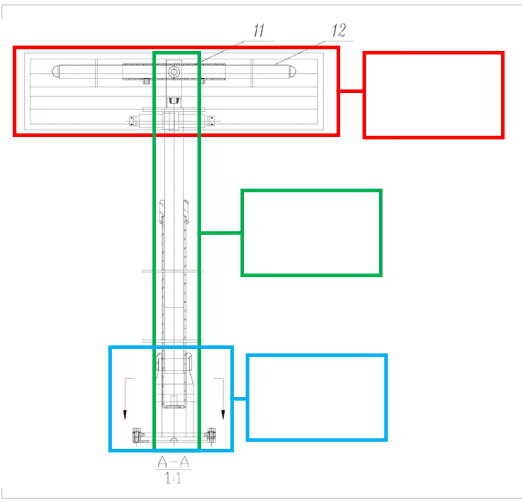
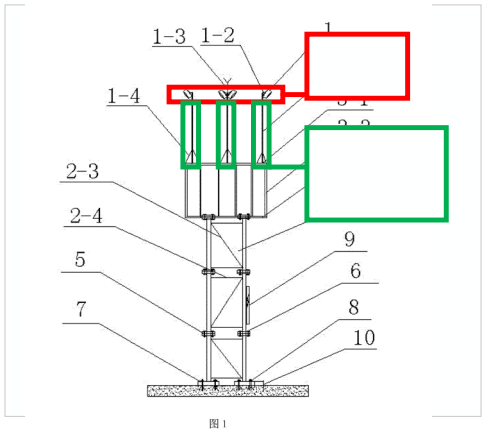
3.	WO Patent Application 2018/042348 A1 (Published: Mar. 8, 2018)	 FIG. 1A FIG. 2 FIGS. 1A and 1B illustrate lights attached to mounting poles on a crown deck.
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U.S. Patent No. 10,976,016 – CLAIMS 1, 2, and 23

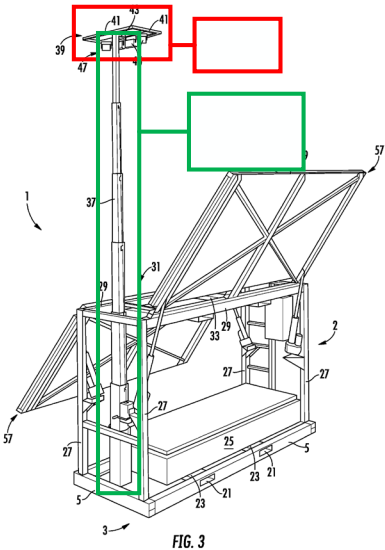
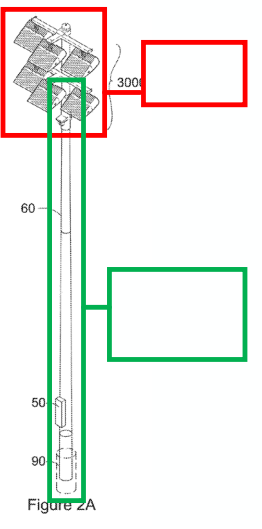
Obvious (35 U.S.C. § 103(a)) Combinations

4.	US Patent No. 4,937,717 (Published: Jun. 26, 1990)	 FIG. 1 illustrates a light attached to a mounting pole.
5.	US Patent No. 5,272,611 (Publication: Dec. 21, 1993)	 FIG. 1 illustrates a light attached to a mounting pole.
6.	Chinese Patent No. 2032-15413U, Entitled: Novel Lighting Lamp Support of Petroleum Drilling Machine Well Site (Published: Sept. 25, 2013)	 FIG. 1 illustrates a light attached to a mounting pole.

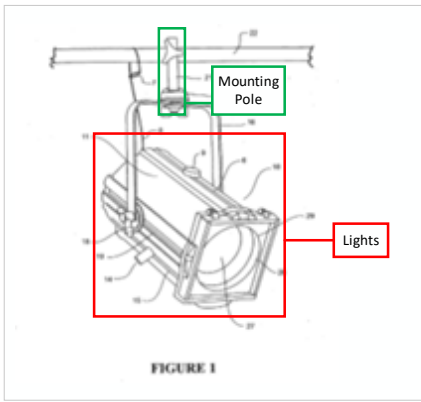
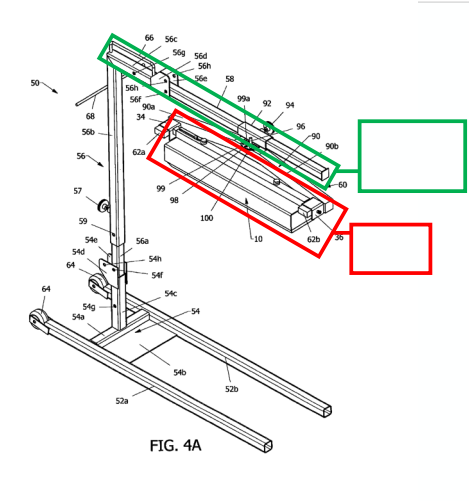
Obvious (35 U.S.C. § 103(a)) Combinations

		 FIGS. 1 and 2 illustrate a light attached to a mounting pole.
7.	Chinese Patent No. 203,336,518U; Entitled: Combined Type Metal Halide Lamp Overhead (Publication: Nov. 28, 2003)	 FIG. 1 illustrates a light attached to a mounting pole or lamp post.

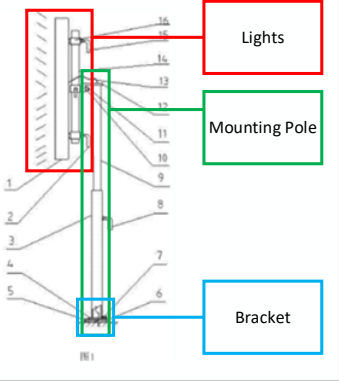
Obvious (35 U.S.C. § 103(a)) Combinations

8.	JP3202623U (Publication: Feb. 12, 2016)	 FIG. 3 FIG. 4 illustrates a light attached to a mounting pole or post.
9.	US 10,356,886 B1 (Publication: July 16, 2019)	 Figure 2A FIG. 2A illustrates a light attached to a mounting pole or post.

Obvious (35 U.S.C. § 103(a)) Combinations

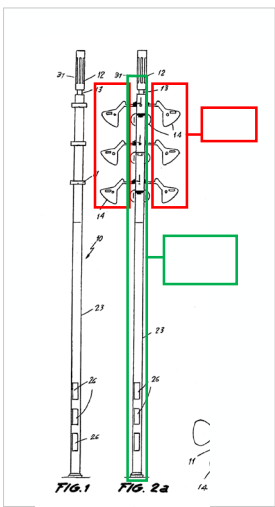
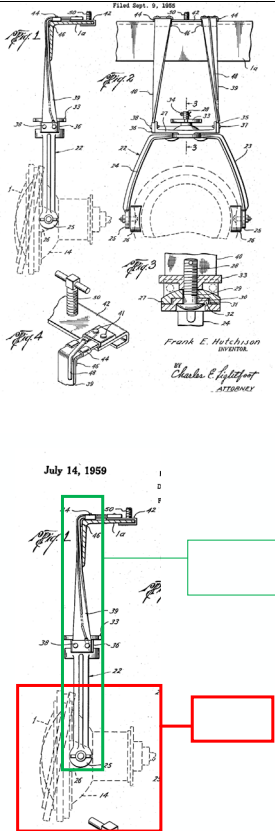
10.	US 20100157602 A1 (Publication: July 9, 2013)	 FIG. 1 illustrates a light attached to a mounting pole or post.
11.	US 20150313181 A1 (Published: Nov. 5, 2015)	 FIG. 4B illustrates a lamp or light connected to one or more mounting poles.

Obvious (35 U.S.C. § 103(a)) Combinations

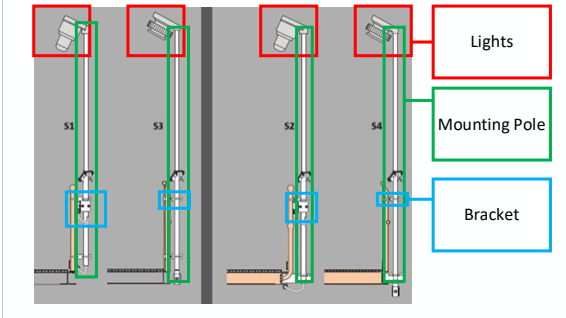
12.	Chinese Patent Application CN108980726A (Publication: Dec. 11, 2018 with filing date June 5, 2017)	 FIG. 1 illustrates a “kind of well site headlamp mounting bracket” including a light attached to a mounting pole or post.
13.	US20170141721A1 (Published: May 18, 2017)	

U.S. Patent No. 10,976,016 – CLAIMS 1, 2, and 23

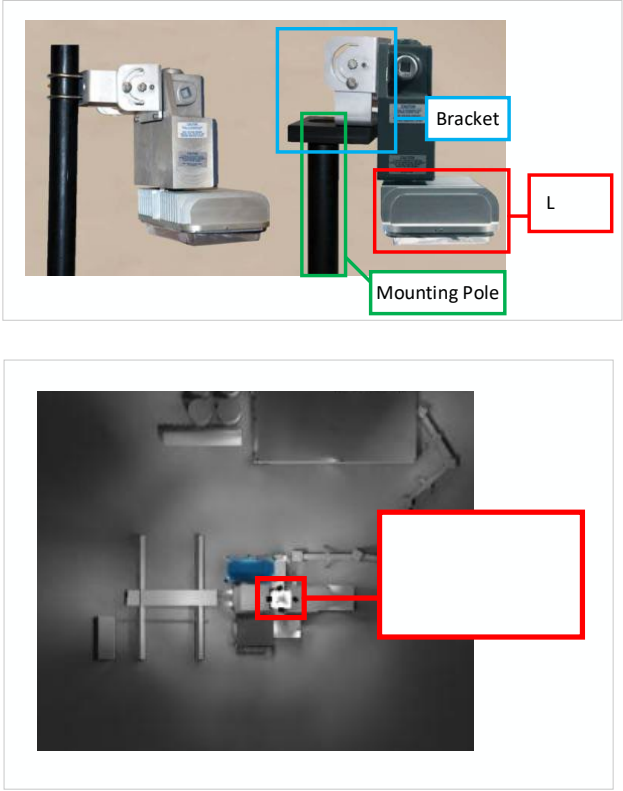
Obvious (35 U.S.C. § 103(a)) Combinations

		FIG. 1 illustrates a light or light attached to a mounting pole.
15.	French patent FR 2883067A3 (Published: Sept. 15, 2006)	 FIG. 1, 2a, and 2b illustrates one or more lights attached to one or more mounting poles.
16.	US Patent No. 2,895,039 (Issued: July 14, 1959)	 “The derrick light is adapted to be suspended from the

Obvious (35 U.S.C. § 103(a)) Combinations

		derrick angle iron 1a by a bracket or yoke member 22, whose arcuate arms 23 and 24 are formed, at their ends, with side bearings 25, 25 that may be pivotally or rotatably secured to the ears 26, 26 on the casing of the light, as shown in Figures 1 and 2.” “The nut 33 is threaded on the free end of the bolt 28 to hold the bracket and cross-arm assembly in any desired horizontal position with respect to the derrick angle iron
17.	Swivelpole™ product catalogue (Published: March 2014)	 “Swivelpole™ solves all your lighting maintenance and upgrade problems in one smart move.” <i>See</i> NABORS_5579; “Join industry leaders worldwide and specify Swivelpole™ Oil & Gas ... End Users ... [Numerous oil and gas operators, e.g., Cenovus, Chevron, Conoco Philips, Marathon, etc.] “Correct installation means the walkway is not obstructed and the Swivelpole™ clears adjacent infrastructure to the side of, or behind, the guardrail. To achieve the correct installation you must consider both the luminaire mounting configuration and the orientation of the Safe Swivel™ joint in relation to the guardrail.”

Obvious (35 U.S.C. § 103(a)) Combinations

18.	Enform’s Lease Lighting Guideline (“Enform’s L.L.G.”) (Published: June 28, 2012)	 Figure F-7 (Page 29) Page 18 – “The tops of buildings and structures can be used as high points to mount additional lights for strategic task or movement areas or areas shadowed by main lighting fixtures. The higher lights can be elevated, the more effective they become at raising and evening out overall illuminance.” Page 20 – “Increase the Number of Attached Lighting Fixtures (Especially LED Lighting Fixtures). Consider adding LED lighting fixtures to trucks and other equipment. LED Lighting is very rugged and can survive vibration and cold, harsh temperatures.” Page 20 – “Mount Light Fixtures on Trucks and Equipment As High As Possible. When adding or adjusting light fixtures on trucks or equipment, select the highest point of the vehicle and aim the light downward to improve the lighting around the vehicle
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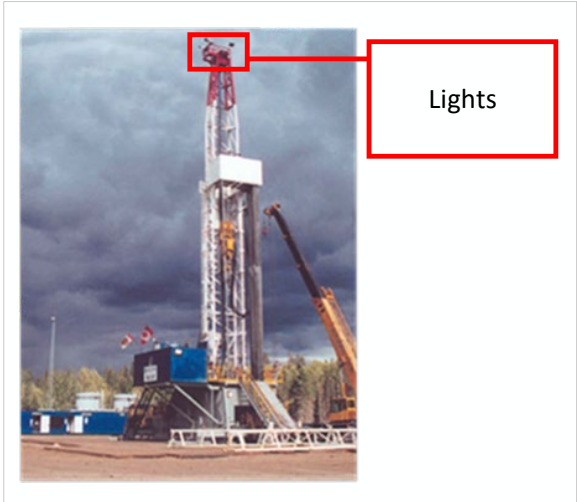
Obvious (35 U.S.C. § 103(a)) Combinations

		or equipment.” Page 25 – “Industrial LED Lighting. LED lighting solutions for industrial applications continue to emerge on the market. These can provide a significant power saving while being more durable and resistant to cold weather than traditional metal halide bulbs. LED lighting solutions may eventually replace more permanent floodlight standards as well as provide a variety of portable lighting solutions, given they can provide significant light from battery power.” Page 25 – See Figures E-7, E-8, E-9 “LED floodlights” Page 26 – See FIGURE E-10 “Class 1, Div II LED designed for petrochemical industrial sites.”
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[e] a light fixture comprising one or more lights, the light fixture coupled to the mounting pole.		
No.	Prior Art	Description
See element [d], above.		

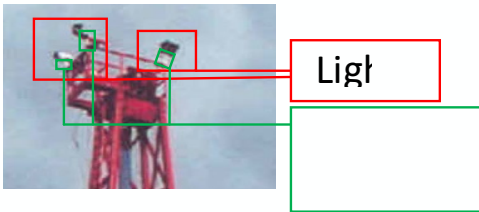
U.S. Patent No. 10,900,626 – CLAIMS 9 and 19

Obvious (35 U.S.C. § 103(a)) Combinations

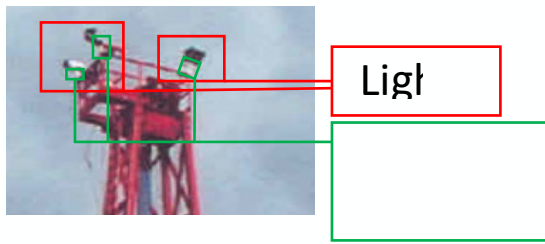
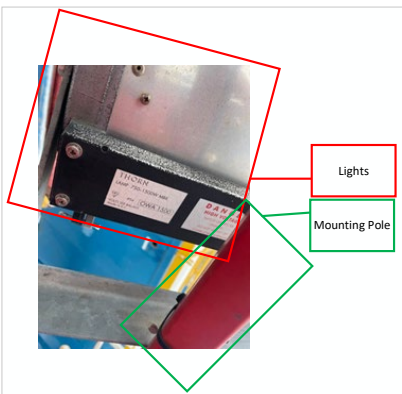
US 10,900,626 B2		
9. A rig comprising:		
No.	Prior Art	Description
1.	NABORS' PRIOR ART DRILLING RIGS (Offered for Sale; In Public Use; and Otherwise Available to the Public: <2003)	
[a] a derrick;		
No.	Prior Art	Description
1.	NABORS' PRIOR ART DRILLING RIGS (Offered for Sale; In Public Use; and Otherwise Available to the Public: <2003)	

Obvious (35 U.S.C. § 103(a)) Combinations

[b] a crown deck at the top of the derrick, the crown deck comprising a handrail; and

No.	Prior Art	Description
1.	NABORS' PRIOR ART DRILLING RIGS (Offered for Sale; In Public Use; and Otherwise Available to the Public: <2003)	

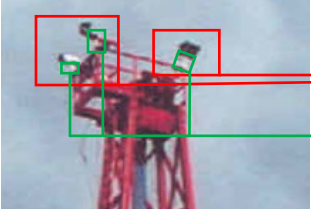
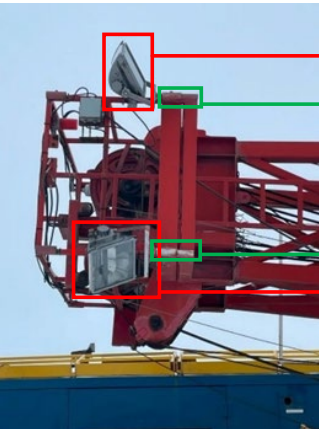
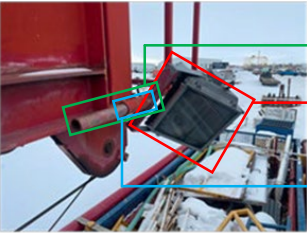
[c] a plurality of light units attached to the handrail, each light unit comprising:

No.	Prior Art	Description
1.	NABORS' PRIOR ART DRILLING RIGS (Offered for Sale; In Public Use; and Otherwise Available to the Public: <2003)	 

[d] a mounting pole, wherein each light unit comprises a separate mounting pole, such that the system comprises a plurality of mounting poles; and

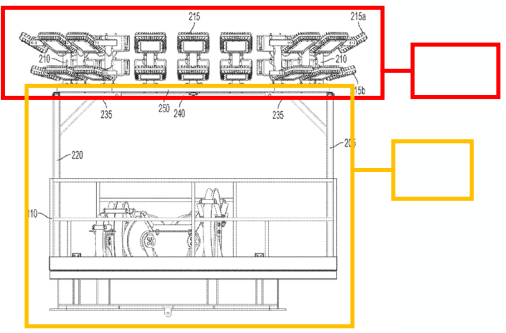
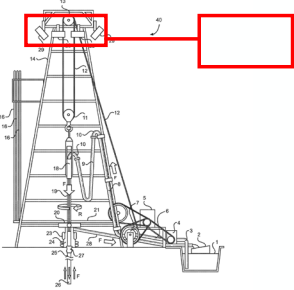
No.	Prior Art	Description
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Obvious (35 U.S.C. § 103(a)) Combinations

1.	NABORS' PRIOR ART DRILLING RIGS (Offered for Sale; In Public Use; and Otherwise Available to the Public: <2003)	 Lights  Lights Mounting Pole Mounting Pole Lights  Mounting Pole Lights Bracket The representative Nabors rigs illustrates a mounting pole attached to a light.
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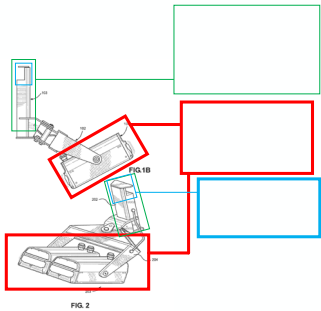
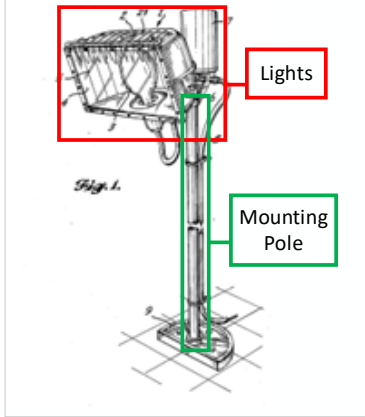
U.S. Patent No. 10,900,626 – CLAIMS 9 and 19

Obvious (35 U.S.C. § 103(a)) Combinations

2.	US Patent Publication 9,316,390 (Published: Apr. 19, 2016)	 FIG. 2 FIG. 2 illustrates lights attached to mounting poles on a crown.
3.	WO Patent Application 2018/042348 A1 (Published: Mar. 8, 2018)	 FIG. 1A

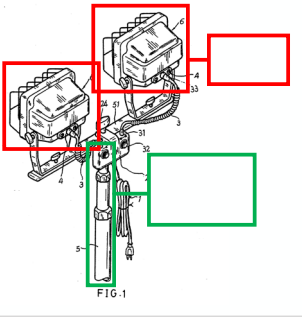
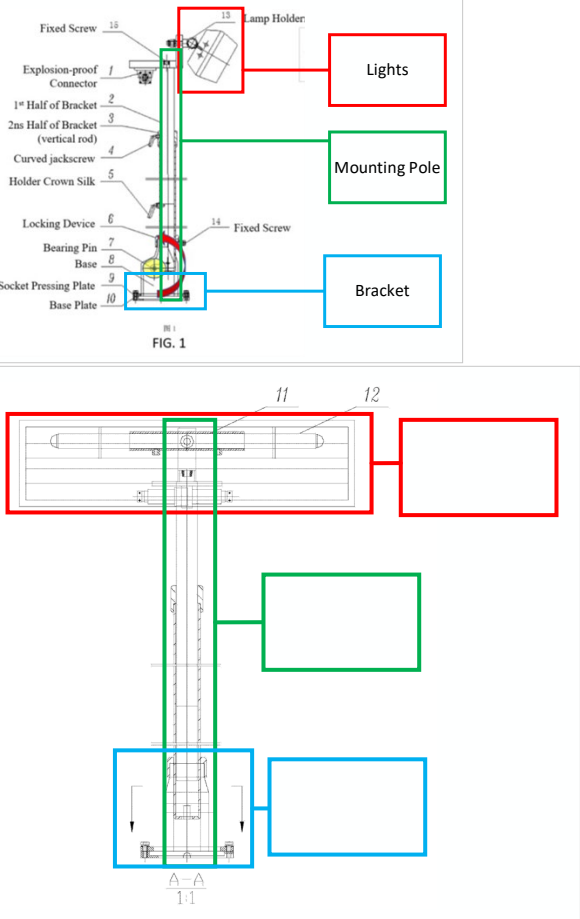
U.S. Patent No. 10,900,626 – CLAIMS 9 and 19

Obvious (35 U.S.C. § 103(a)) Combinations

		 FIG. 2 FIGS. 1A and 1B illustrate lights attached to mounting poles on a crown deck.
4.	US Patent No. 4,937,717 (Published: Jun. 26, 1990)	 FIG. 1 FIG. 1 illustrates a light attached to a mounting pole.

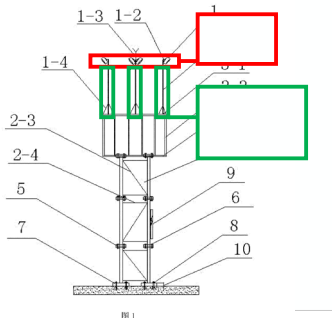
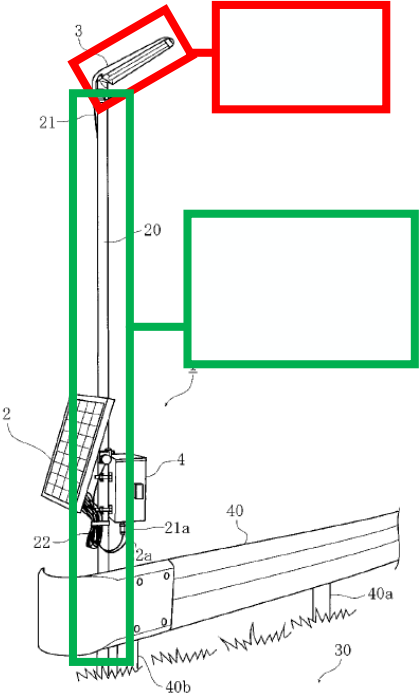
U.S. Patent No. 10,900,626 – CLAIMS 9 and 19

Obvious (35 U.S.C. § 103(a)) Combinations

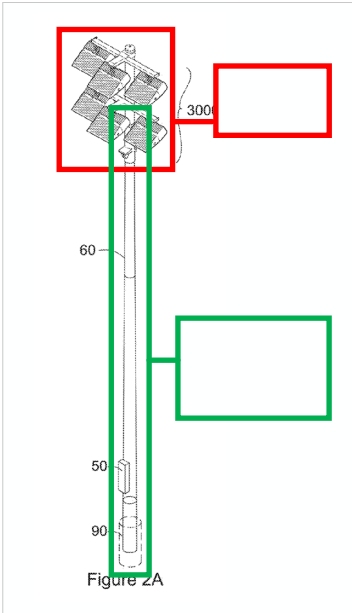
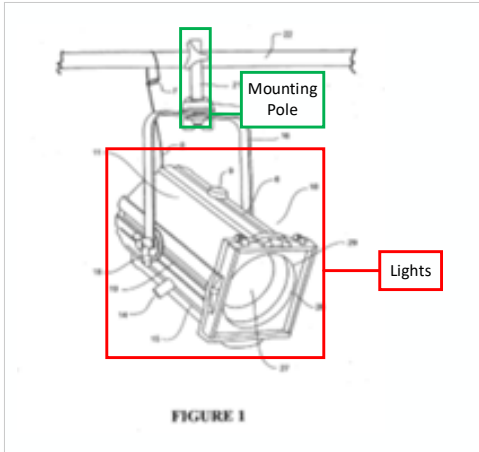
5.	US Patent No. 5,272,611 (Publication: Dec. 21, 1993)	 FIG. 1 illustrates a light attached to a mounting pole.
6.	Chinese Patent No. 2032-15413U, Entitled: Novel Lighting Lamp Support of Petroleum Drilling Machine Well Site (Published: Sept. 25, 2013)	 FIGS. 1 and 2 illustrate a light attached to a mounting pole.

U.S. Patent No. 10,900,626 – CLAIMS 9 and 19

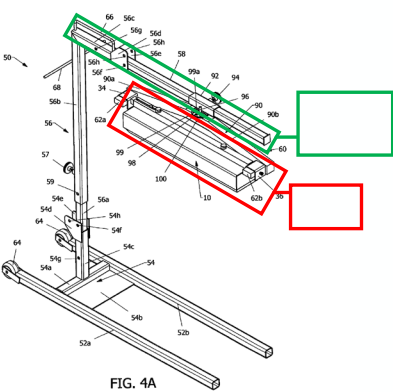
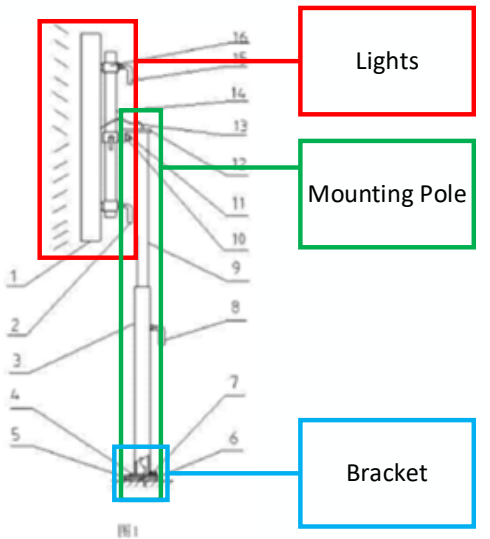
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7.	Chinese Patent No. 203,336,518U; Entitled: Combined Type Metal Halide Lamp Overhead (Publication: Nov. 28, 2003)	 FIG. 1 illustrates a light attached to a mounting pole or lamp post.
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9.	US 10,356,886 B1 (Publication: July 16, 2019)	

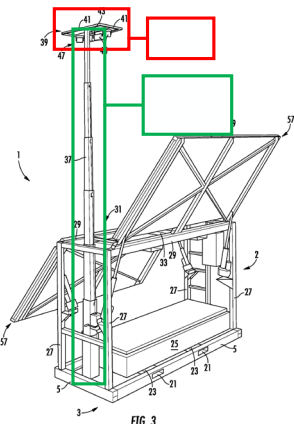
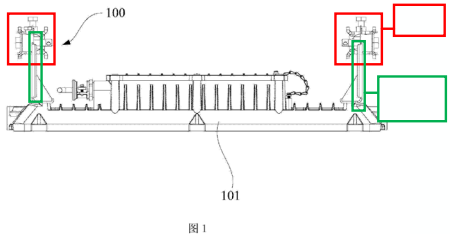
Obvious (35 U.S.C. § 103(a)) Combinations

		 FIG. 2A illustrates a light attached to a mounting pole or post.
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Obvious (35 U.S.C. § 103(a)) Combinations

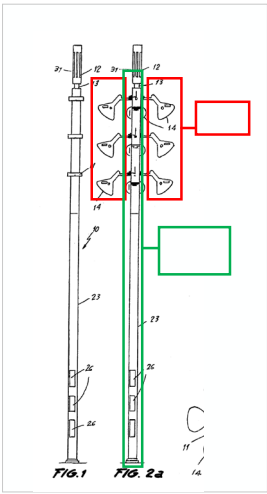
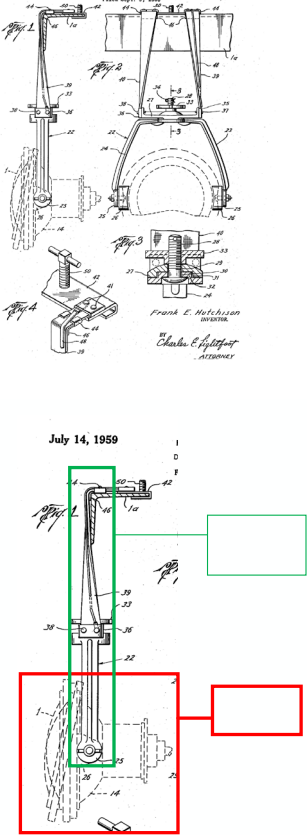
11.	US 20150313181 A1 (Published: Nov. 5, 2015)	 FIG. 4A FIG. 4B illustrates a lamp or light connected to one or more mounting poles.
12.	Chinese Patent Application CN108980726A (Publication: Dec. 11, 2018 with filing date June 5, 2017)	 FIG. 1 FIG. 1 illustrates a “kind of well site headlamp mounting bracket” including a light attached to a mounting pole or post.

Obvious (35 U.S.C. § 103(a)) Combinations

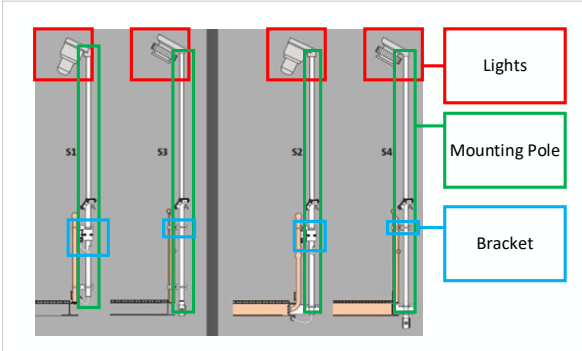
13.	US20170141721A1 (Published: May 18, 2017)	 FIG. 3 illustrates a light or lamp attached to a mounting pole.
14.	CN104214723A (Published: Dec. 17, 2014)	 FIG. 1 illustrates a light or light attached to a mounting pole.

U.S. Patent No. 10,900,626 – CLAIMS 9 and 19

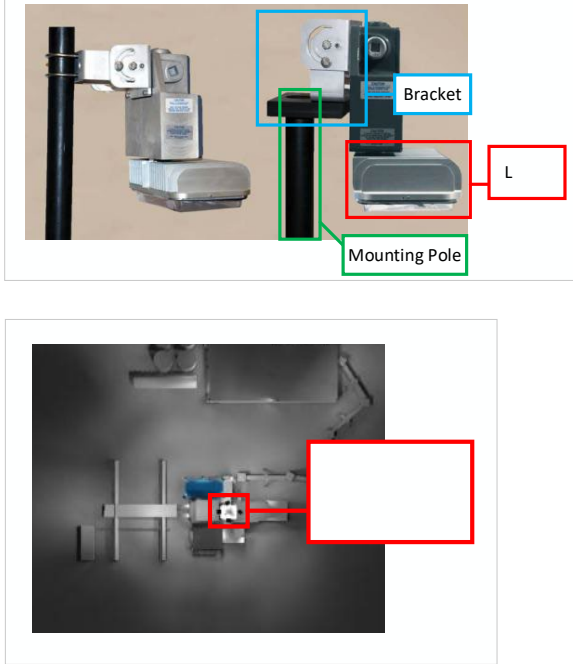
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Obvious (35 U.S.C. § 103(a)) Combinations

		with side bearings 25, 25 that may be pivotally or rotatably secured to the ears 26, 26 on the casing of the light, as shown in Figures 1 and 2.” “The nut 33 is threaded on the free end of the bolt 28 to hold the bracket and cross-arm assembly in any desired horizontal position with respect to the derrick angle iron
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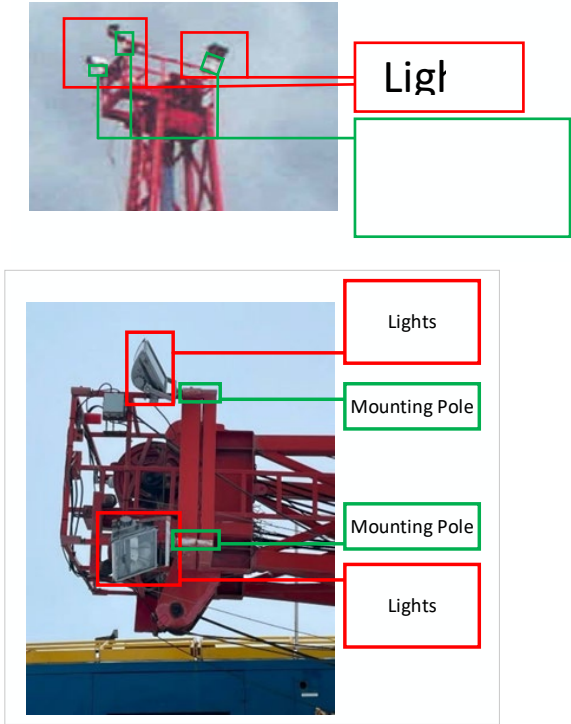
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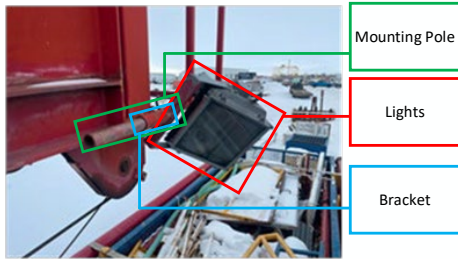
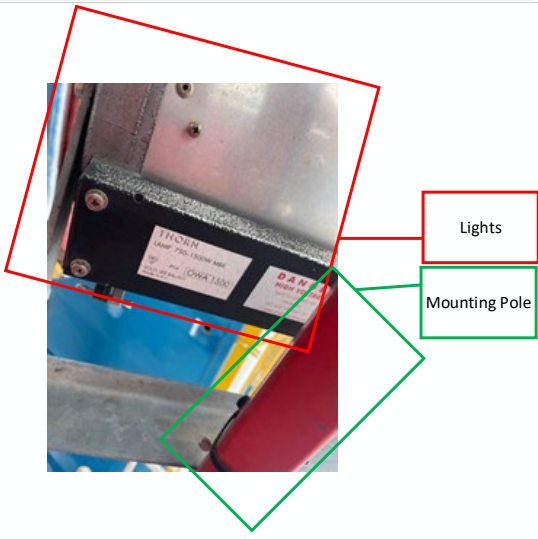
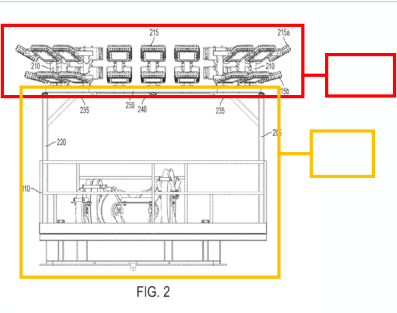
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[e] a light fixture comprising one or more lights, the light fixture coupled to the mounting pole.

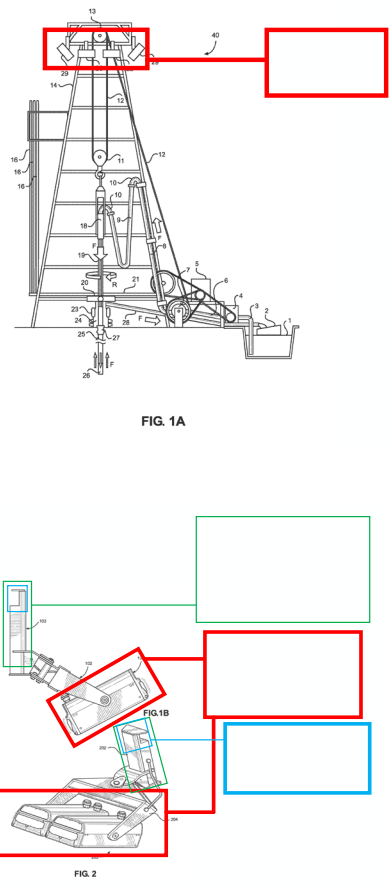
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U.S. Patent No. 10,900,626 – CLAIMS 9 and 19

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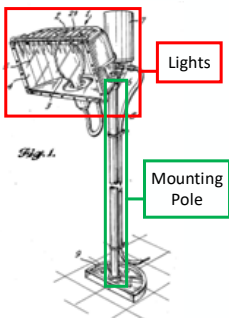
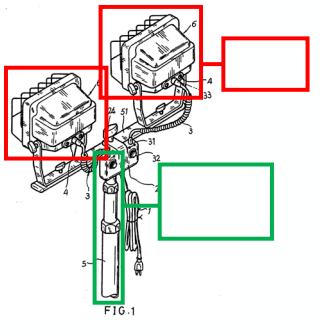
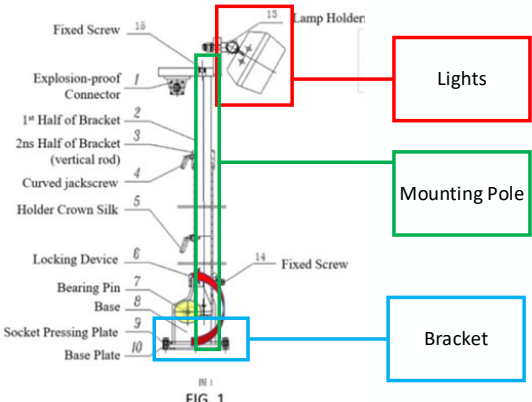
		 Mounting Pole Lights Bracket
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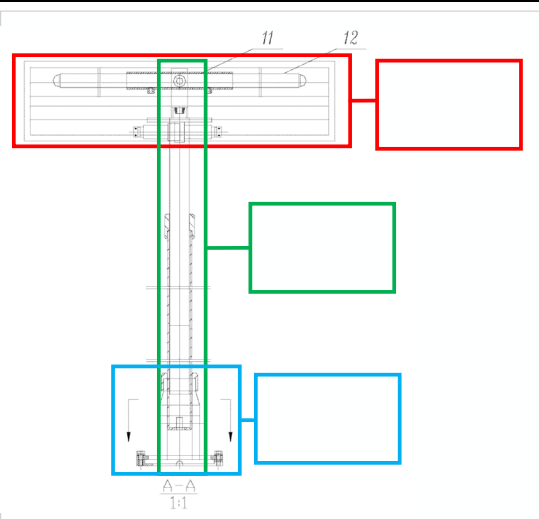
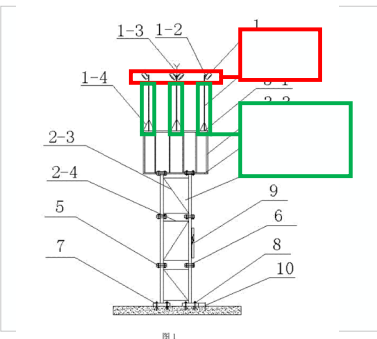
3.	WO Patent Application 2018/042348 A1 (Published: Mar. 8, 2018)	 FIG. 1A FIG. 1B FIG. 2 FIGS. 1A and 1B illustrate lights attached to mounting poles on a crown deck.
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U.S. Patent No. 10,900,626 – CLAIMS 9 and 19

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6.	Chinese Patent No. 2032-15413U, Entitled: Novel Lighting Lamp Support of Petroleum Drilling Machine Well Site (Published: Sept. 25, 2013)	 FIG. 1

Obvious (35 U.S.C. § 103(a)) Combinations

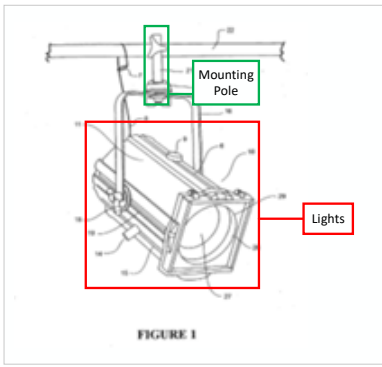
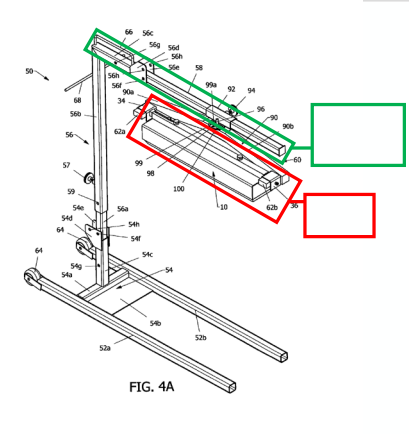
		 FIGS. 1 and 2 illustrate a light attached to a mounting pole.
7.	Chinese Patent No. 203,336,518U; Entitled: Combined Type Metal Halide Lamp Overhead (Publication: Nov. 28, 2003)	 FIG. 1 illustrates a light attached to a mounting pole or lamp post.

Obvious (35 U.S.C. § 103(a)) Combinations

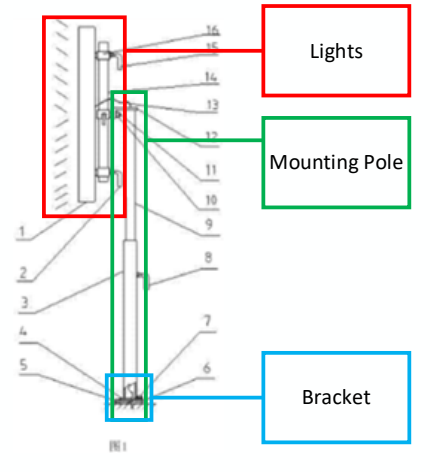
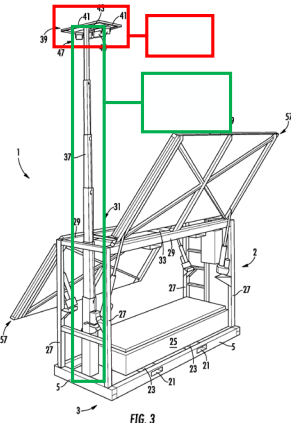
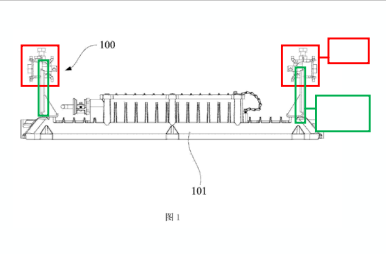
C&M Oilfield Rentals Ex. 2003 - Page 85
Ensign US Southern Drilling LLC v. C&M Oilfield Rentals LLC
IPR2023-00804 - U.S. Patent No. 10,976,016

U.S. Patent No. 10,900,626 – CLAIMS 9 and 19

Obvious (35 U.S.C. § 103(a)) Combinations

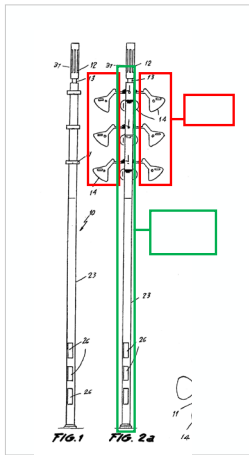
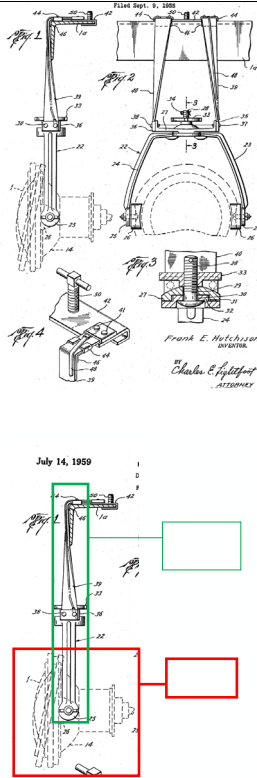
10.	US 20100157602 A1 (Publication: July 9, 2013)	 FIG. 1 illustrates a light attached to a mounting pole or post.
11.	US 20150313181 A1 (Published: Nov. 5, 2015)	 FIG. 4B illustrates a lamp or light connected to one or more mounting poles.

Obvious (35 U.S.C. § 103(a)) Combinations

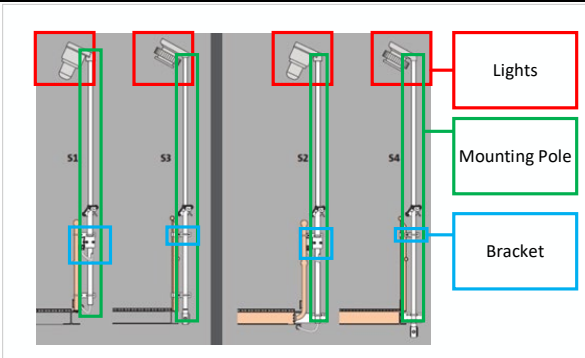
12. Chinese Patent Application CN108980726A (Publication: Dec. 11, 2018 with filing date June 5, 2017)		 FIG. 1 illustrates a “kind of well site headlamp mounting bracket” including a light attached to a mounting pole or post.
13. US20170141721A1 (Published: May 18, 2017)		 FIG. 3 illustrates a light or lamp attached to a mounting pole.
14. CN104214723A (Published: Dec. 17, 2014)		 FIG. 1 illustrates a well site headlamp mounting bracket including a light attached to a mounting pole or post.

U.S. Patent No. 10,900,626 – CLAIMS 9 and 19

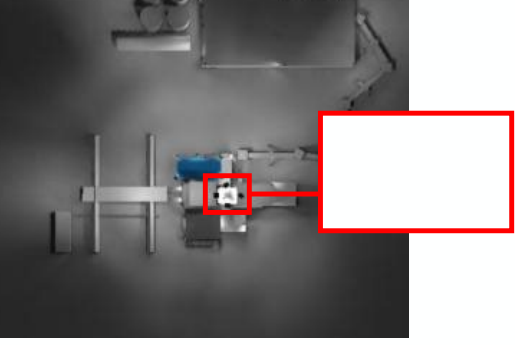
Obvious (35 U.S.C. § 103(a)) Combinations

		FIG. 1 illustrates a light or light attached to a mounting pole.
15.	French patent No. 2883067A3 (Published: Sept. 15, 2006)	 FIG. 1, 2a, and 2b illustrates one or more lights attached to one or more mounting poles.
16.	US Patent No. 2,895,039 (Issued: July 14, 1959)	 “The derrick light is adapted to be suspended from the

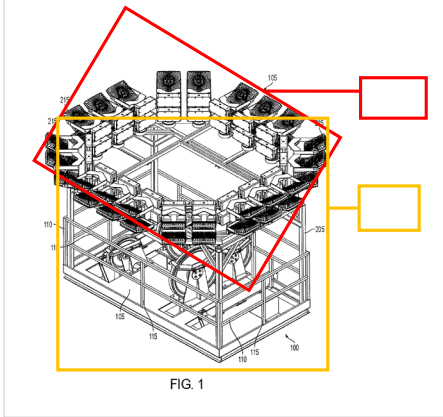
Obvious (35 U.S.C. § 103(a)) Combinations

		derrick angle iron 1a by a bracket or yoke member 22, whose arcuate arms 23 and 24 are formed, at their ends, with side bearings 25, 25 that may be pivotally or rotatably secured to the ears 26, 26 on the casing of the light, as shown in Figures 1 and 2.” “The nut 33 is threaded on the free end of the bolt 28 to hold the bracket and cross-arm assembly in any desired horizontal position with respect to the derrick angle iron
17.	Swivelpole™ product catalogue (Published: March 2014)	 “Swivelpole™ solves all your lighting maintenance and upgrade problems in one smart move.” See NABORS_5579; “Join industry leaders worldwide and specify Swivelpole™ Oil & Gas ... End Users ... [Numerous oil and gas operators, e.g., Cenovus, Chevron, Conoco Philips, Marathon, etc.] “Correct installation means the walkway is not obstructed and the Swivelpole™ clears adjacent infrastructure to the side of, or behind, the guardrail. To achieve the correct installation you must consider both the luminaire mounting configuration and the orientation of the Safe Swivel™ joint in relation to the guardrail.”

Obvious (35 U.S.C. § 103(a)) Combinations

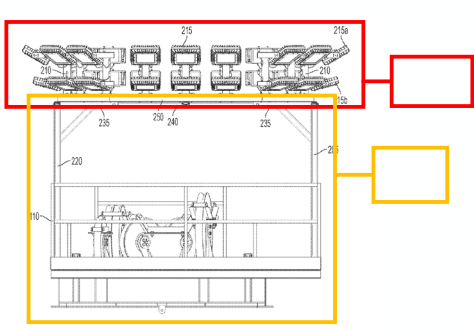
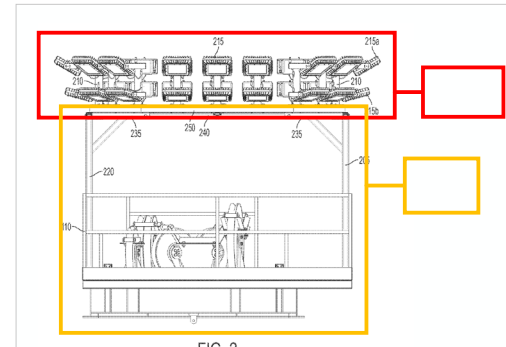
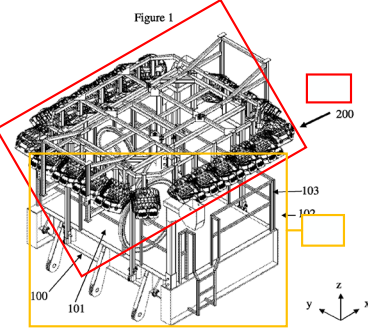
18.	Enform's Lease Lighting Guideline ("Enform's L.L.G.") (Published: June 28, 2012)	A photograph of a lighting fixture assembly. A blue bracket is mounted on a black mounting pole. A red box labeled 'L' points to a component of the fixture. A green box labeled 'Mounting Pole' points to the pole itself. A photograph of a lighting fixture assembly. A red box highlights a component of the fixture. The lighting guidelines illustrates lights attached to mounting poles designed for petrochemical industrial sites.
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Obvious (35 U.S.C. § 103(a)) Combinations

19. A method of illuminating a wellsite, comprising:		
[a] 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 deck;		
No.	Prior Art	Description
1.	US Patent No. 10,145,544 B2 (Published: Dec. 4, 2018)	 FIG. 1 “Lighting system 200 generally includes a lighting frame 205 (shown in FIG. 6, and described in more detail herein below), a plurality of light support posts 210, which are rotatable so as to allow each individual light fixture to swivel, arranged around a perimeter of the lighting frame and extending vertically such that one or more light fixtures 215, 215 a and/or 215 b, may be connected to each light support post 210. Light fixture brackets 251 are also structured so as to allow each light fixture to tilt up and down. 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.” US Patent No. 10,145,544 B2 is a continuation-in-part of U.S. patent application Ser. No. 14/093,097 filed Nov. 29, 2013 to which it claims priority. These patents have an identical disclosure as U.S. Patent No. 10,976,016 B2, and thus anticipates each of the claims. To the extent that US Patent No. 10,145,544 B2 does disclose each and every element of U.S. Patent No. 10,976,016 B2, a POSA would combine it with at least one of the following reference to arrive at the full disclosure for the predictable solution of light attached to poles on crown deck’s handrail.

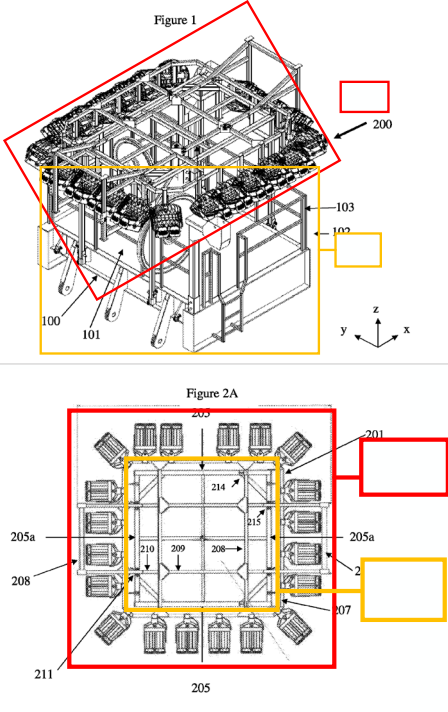
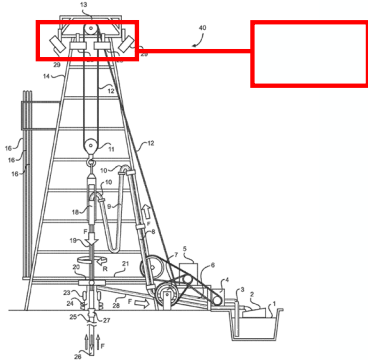
U.S. Patent No. 10,900,626 – CLAIMS 9 and 19

Obvious (35 U.S.C. § 103(a)) Combinations

2.	US Patent Publication 9,316,390 (Published: Apr. 19, 2016)	 FIG. 2 FIG. 2 illustrates a plurality of lights units attached to the crown deck of a rig.
3.	US Patent Application Publication 2015/0184840 A1	 FIG. 2 FIG. 2 illustrates a plurality of lights units attached to the crown deck of a rig.
4.	WO Patent Application 2018/020400 A1 (Published: Feb. 1, 2018)	 FIG. 1 FIG. 1 illustrates a plurality of lights units attached to the crown deck of a rig.

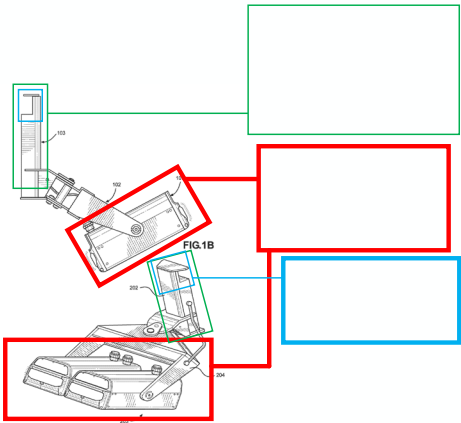
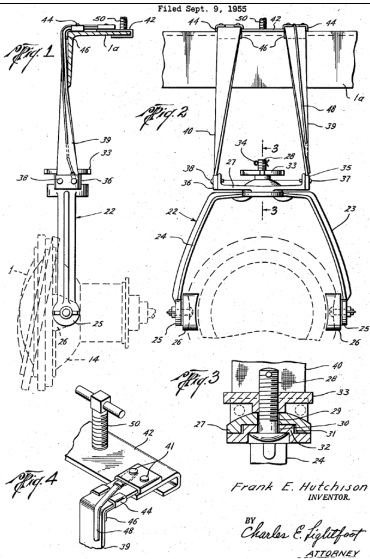
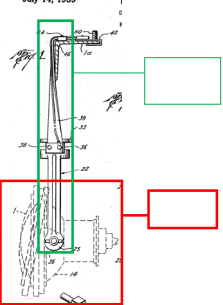
U.S. Patent No. 10,900,626 – CLAIMS 9 and 19

Obvious (35 U.S.C. § 103(a)) Combinations

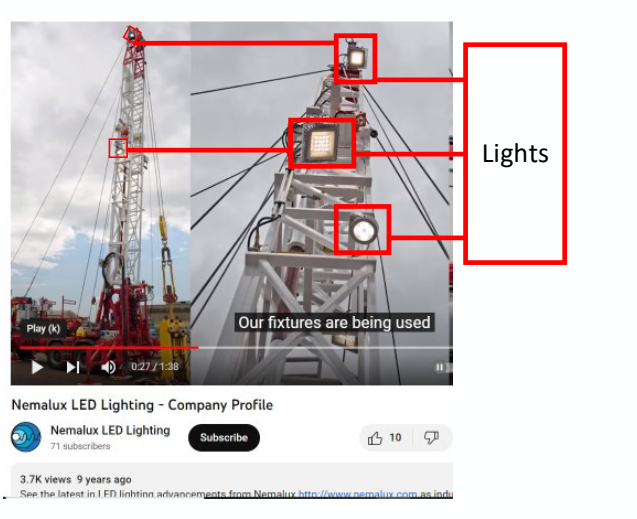
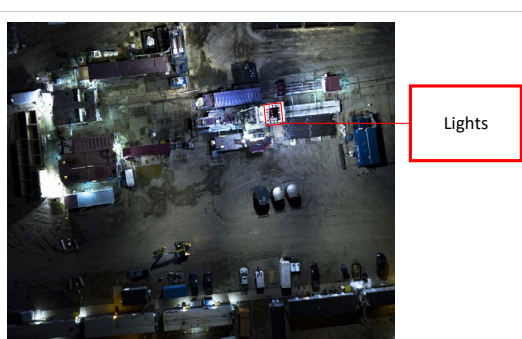
5. US Patent Application Publication 2019/0242218 (Published: Aug. 8, 2019)		 FIG. 1 and FIG. 2A illustrate a plurality of lights units attached to the crown deck of a rig.
6. WO Patent Application 2018/042348 A1 (Published: Mar. 8, 2018)		 FIG. 1A

U.S. Patent No. 10,900,626 – CLAIMS 9 and 19

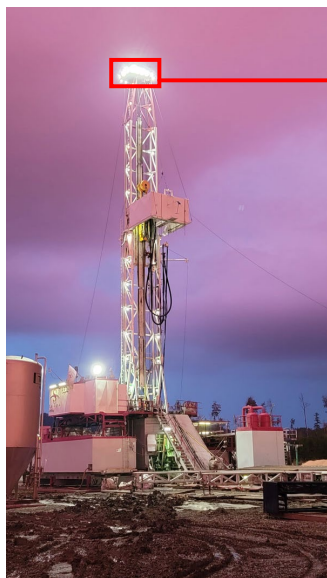
Obvious (35 U.S.C. § 103(a)) Combinations

		 FIG. 2 FIGs. 1A, 1B, and 2 illustrate a plurality of lights units attached to the crown deck of a rig.
7.	US Patent No. 2,895,039 (Issued: July 14, 1959)	 July 14, 1959  “The derrick light is adaptaed to be suspended from the derrick angle iron 1a by a bracket or yoke member 22,

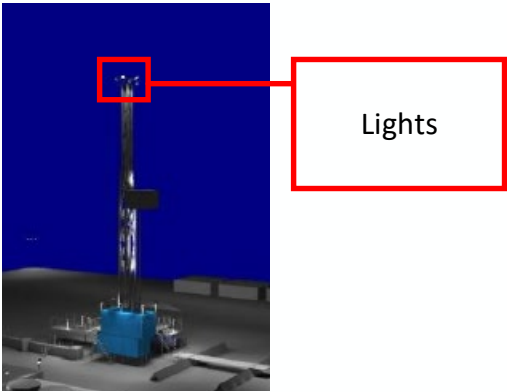
Obvious (35 U.S.C. § 103(a)) Combinations

		whose arcuate arms 23 and 24 are formed, at their ends, with side bearings 25, 25 that may be pivotally or rotatably secured to the ears 26, 26 on the casing of the light, as shown in Figures 1 and 2.” “The nut 33 is threaded on the free end of the bolt 28 to hold the bracket and cross-arm assembly in any desired horizontal position with respect to the derrick angle iron.
8.	NEMALUX LED LIGHTING – COMPANY PROFILE (Youtube™) (Publicly Avail: Jan 6, 2014)	 The video player shows a derrick structure with three red boxes highlighting specific lights. A red bracket on the right side of the video frame groups these three boxes with the label "Lights". The video player interface includes a play button, a progress bar at 0:27 / 1:38, and the channel name "Nemalux LED Lighting - Company Profile" with 71 subscribers and 10 likes.  The image shows an aerial night view of an industrial site, likely an oilfield. A red box highlights a specific light source in the center of the site, which is labeled "Lights".

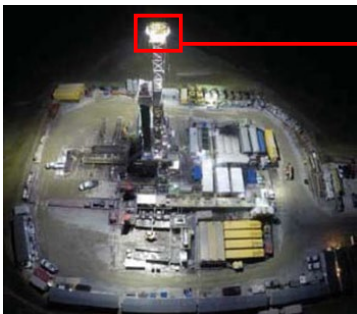
Obvious (35 U.S.C. § 103(a)) Combinations

		 “Providing even illumination with relatively low max. to min. ratios for sites that are commonly re-organized with each move is best accomplished by supplementing the conventional approach with high output and optically controlled floodlights mounted at the top of the drilling rig and distributed evenly to deliver 360° coverage. Positioning LED floodlights at such an elevated mounting location reduces the potential for glare, increases visibility throughout the site as well as substantially reduces maintenance and rental costs.”
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Obvious (35 U.S.C. § 103(a)) Combinations

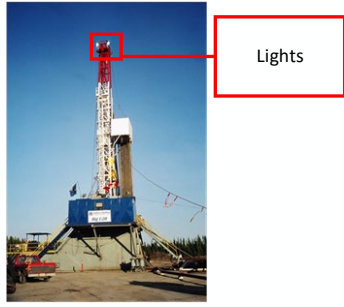
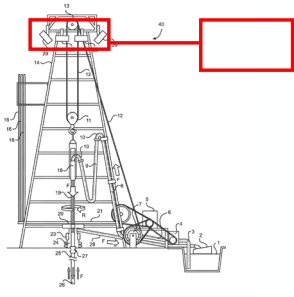
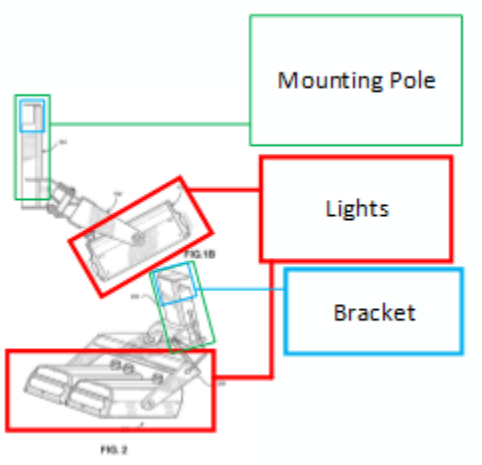
9.	Enform’s Lease Lighting Guideline (“Enform’s L.L.G.”) (Published: June 28, 2012)	 Figure F-7 (Page 29) Page 18 – “The tops of buildings and structures can be used as high points to mount additional lights for strategic task or movement areas or areas shadowed by main lighting fixtures. The higher lights can be elevated, the more effective they become at raising and evening out overall illuminance.” Page 20 – “Increase the Number of Attached Lighting Fixtures (Especially LED Lighting Fixtures). Consider adding LED lighting fixtures to trucks and other equipment. LED Lighting is very rugged and can survive vibration and cold, harsh temperatures.” Page 20 – “Mount Light Fixtures on Trucks and Equipment As High As Possible. When adding or adjusting light fixtures on trucks or equipment, select the highest point of the vehicle and aim the light downward to improve the lighting around the vehicle or equipment.” Page 25 – “Industrial LED Lighting. LED lighting solutions for industrial applications
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Obvious (35 U.S.C. § 103(a)) Combinations

		continue to emerge on the market. These can provide a significant power saving while being more durable and resistant to cold weather than traditional metal halide bulbs. LED lighting solutions may eventually replace more permanent floodlight standards as well as provide a variety of portable lighting solutions, given they can provide significant light from battery power.” Page 25 – See Figures E-7, E-8, E-9 “LED floodlights” Page 26 – See FIGURE E-10 “Class 1, Div II LED designed for petrochemical industrial sites.”
10.	Apollo’s Offer to Sell its “Halo” Lighting System (Offered for Sale: October 18, 2017)	
11.	NABORS’ PRIOR ART DRILLING RIGS (Offered for Sale; In Public Use; and Otherwise Available to the Public: <2003)	

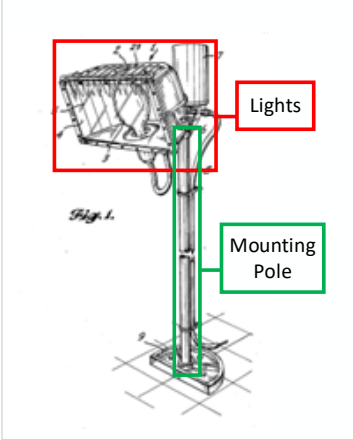
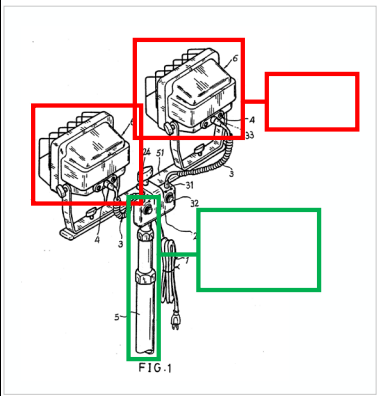
U.S. Patent No. 10,900,626 – CLAIMS 9 and 19

Obvious (35 U.S.C. § 103(a)) Combinations

		
12.	WO Patent Application 2018/042348 A1 (Published: Mar. 8, 2018)	 FIG. 1A  FIGS. 1A and 1B illustrate lights attached to mounting poles on a crown deck.

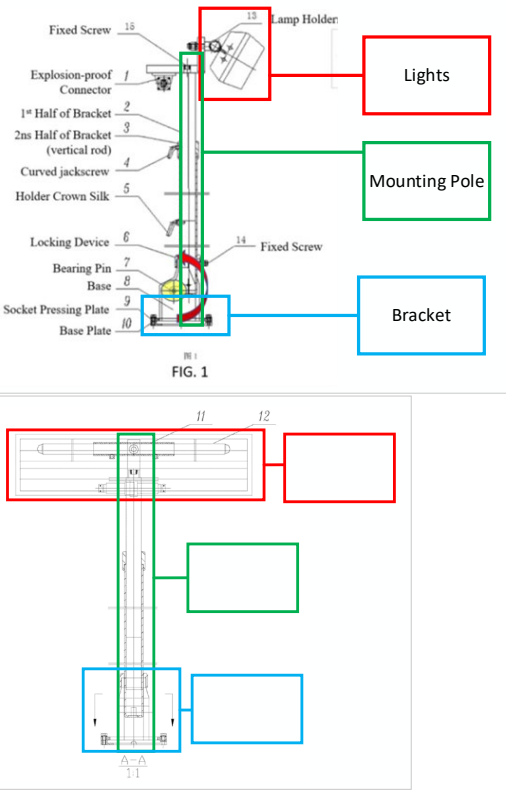
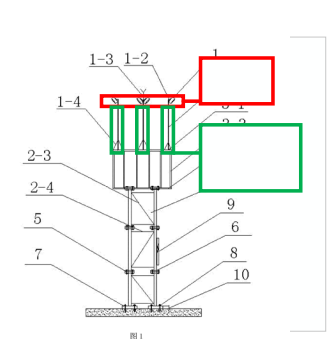
U.S. Patent No. 10,900,626 – CLAIMS 9 and 19

Obvious (35 U.S.C. § 103(a)) Combinations

13.	US Patent No. 4,937,717 (Published: Jun. 26, 1990)	 FIG. 1 illustrates a light attached to a mounting pole.
14.	US Patent No. 5,272,611 (Publication: Dec. 21, 1993)	 FIG. 1 illustrates a light attached to a mounting pole.

U.S. Patent No. 10,900,626 – CLAIMS 9 and 19

Obvious (35 U.S.C. § 103(a)) Combinations

15.	Chinese Patent No. 2032-15413U, Entitled: Novel Lighting Lamp Support of Petroleum Drilling Machine Well Site (Published: Sept. 25, 2013)	 FIGS. 1 and 2 illustrate a light attached to a mounting pole.
16.	Chinese Patent No. 203,336,518U; Entitled: Combined Type Metal Halide Lamp Overhead (Publication: Nov. 28, 2003)	 FIG. 1 illustrates a light attached to a mounting pole or lamp post.

Obvious (35 U.S.C. § 103(a)) Combinations

17.	JP3202623U (Publication: Feb. 12, 2016)	FIG. 4 illustrates a light attached to a mounting pole or post.
18.	US 10,356,886 B1 (Publication: July 16, 2019)	FIG. 2A illustrates a light attached to a mounting pole or post.
19.	US 20100157602 A1 (Publication: July 9, 2013)	FIG. 1 illustrates a light attached to a mounting pole or post.

Obvious (35 U.S.C. § 103(a)) Combinations

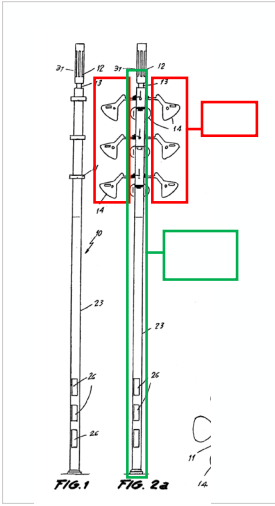
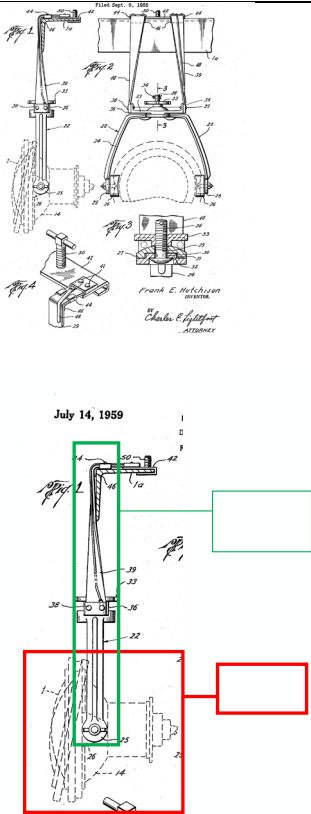
20.	US 20150313181 A1 (Published: Nov. 5, 2015)	FIG. 4A FIG. 4B illustrates a lamp or light connected to one or more mounting poles.
21.	Chinese Patent Application CN108980726A (Publication: Dec. 11, 2018 with filing date June 5, 2017)	FIG. 1 FIG. 1 illustrates a “kind of well site headlamp mounting bracket” including a light attached to a mounting pole or post.

Obvious (35 U.S.C. § 103(a)) Combinations

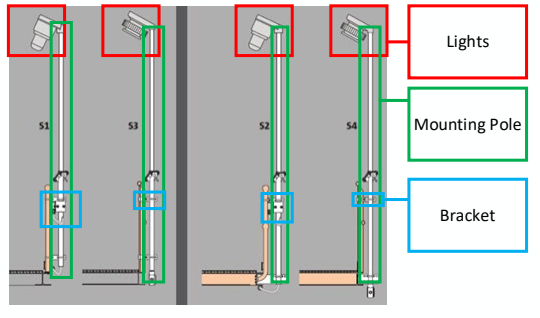
22.	US20170141721A1 (Published: May 18, 2017)	
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U.S. Patent No. 10,900,626 – CLAIMS 9 and 19

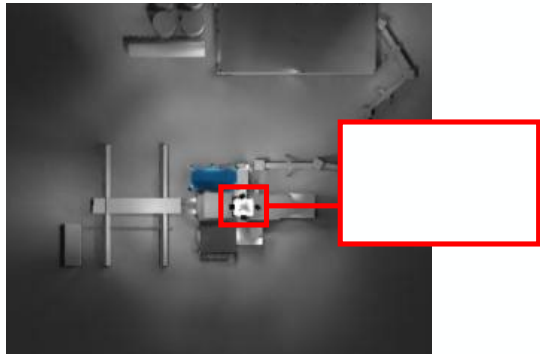
Obvious (35 U.S.C. § 103(a)) Combinations

24.	French patent No. 2883067A3 (Published: Sept. 15, 2006)	 FIG. 1, 2a, and 2b illustrates one or more lights attached to one or more mounting poles.
25.	US Patent No. 2,895,039 (Issued: July 14, 1959)	 “The derrick light is adapted to be suspended from the derrick angle iron 1a by a bracket or yoke member 22, whose arcuate arms 23 and 24 are formed, at their ends, with side bearings 25, 25 that may be pivotally or

Obvious (35 U.S.C. § 103(a)) Combinations

		rotatably secured to the ears 26, 26 on the casing of the light, as shown in Figures 1 and 2.” “The nut 33 is threaded on the free end of the bolt 28 to hold the bracket and cross-arm assembly in any desired horizontal position with respect to the derrick angle iron
26.	Swivelpole™ product catalogue (Published: March 2014)	 “Swivelpole™ solves all your lighting maintenance and upgrade problems in one smart move.” See NABORS_5579; “Join industry leaders worldwide and specify Swivelpole™ Oil & Gas ... End Users ... [Numerous oil and gas operators, e.g., Cenovus, Chevron, Conoco Philips, Marathon, etc.] “Correct installation means the walkway is not obstructed and the Swivelpole™ clears adjacent infrastructure to the side of, or behind, the guardrail. To achieve the correct installation you must consider both the luminaire mounting configuration and the orientation of the Safe Swivel™ joint in relation to the guardrail.”

Obvious (35 U.S.C. § 103(a)) Combinations

27.	Enform's Lease Lighting Guideline ("Enform's L.L.G.") (Published: June 28, 2012)	 Diagram of a lighting fixture assembly. A bracket is mounted on a mounting pole. A light fixture is attached to the bracket. A label 'L' points to the light fixture. A label 'Mounting Pole' points to the pole. A label 'Bracket' points to the bracket.  Photograph of a lighting fixture assembly. A red box highlights a component of the assembly. The lighting guidelines illustrates lights attached to mounting poles designed for petrochemical industrial sites. Figure F-7 (Page 29) Page 18 – “The tops of buildings and structures can be used as high points to mount additional lights for strategic task or movement areas or areas shadowed by main lighting fixtures. The higher lights can be elevated, the more effective they become at raising and evening out overall illuminance.” Page 20 – “Increase the Number of Attached Lighting Fixtures (Especially LED Lighting Fixtures). Consider adding LED lighting fixtures to trucks and other equipment. LED Lighting is very rugged and can survive vibration and cold, harsh temperatures.” Page 20 – “Mount Light Fixtures on Trucks and Equipment As High As Possible.
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Obvious (35 U.S.C. § 103(a)) Combinations

		When adding or adjusting light fixtures on trucks or equipment, select the highest point of the vehicle and aim the light downward to improve the lighting around the vehicle or equipment.” Page 25 – “Industrial LED Lighting. LED lighting solutions for industrial applications continue to emerge on the market. These can provide a significant power saving while being more durable and resistant to cold weather than traditional metal halide bulbs. LED lighting solutions may eventually replace more permanent floodlight standards as well as provide a variety of portable lighting solutions, given they can provide significant light from battery power.” Page 25 – See Figures E-7, E-8, E-9 “LED floodlights” Page 26 – See FIGURE E-10 “Class 1, Div II LED designed for petrochemical industrial sites.”
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[b] 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

No.	Prior Art	Description
See chart for [a], above.		

[c] illuminating the wellsite using the plurality of lights.

No.	Prior Art	Description
See chart for [a], above.		