

**IN THE UNITED STATES DISTRICT COURT  
FOR THE NORTHERN DISTRICT OF TEXAS  
DALLAS DIVISION**

|                              |   |                             |
|------------------------------|---|-----------------------------|
| MULTIQUIP INC.,              | ) |                             |
|                              | ) |                             |
|                              | ) |                             |
| Plaintiff,                   | ) |                             |
|                              | ) |                             |
| v.                           | ) |                             |
|                              | ) | CIVIL ACTION 3:22-CV-2599-M |
| ALLIANCE NORTH AMERICA, INC. | ) |                             |
| dba ANA                      | ) |                             |
|                              | ) |                             |
| Defendant.                   | ) |                             |
|                              | ) |                             |
|                              | ) |                             |
|                              | ) |                             |
|                              | ) |                             |

**DEFENDANT ALLIANCE NORTH AMERICA, INC.’S  
PRELIMINARY INVALIDITY CONTENTIONS**

Pursuant to Miscellaneous Order No. 62, Sections 3-3 and 3-4, Defendant Alliance North America, Inc. dba ANA (hereinafter “Defendant” or “ANA”) makes the following Disclosure to Plaintiff Multiquip Inc. (“Plaintiff” or “Multiquip”) of Defendant ANA’s Preliminary Invalidity Contentions. These disclosures are based on information reasonably available to Defendant as of this date. As specified under Miscellaneous Order No. 62, Sections 3-3, these contentions are directed to the asserted claims as set forth by Plaintiff Multiquip. Defendant reserves the right to supplement or modify these disclosures as allowed

under the Miscellaneous Order No. 62 and applicable Federal Rules.

**I. Section 3-3 Disclosure of Preliminary Invalidity Contentions**

Defendant ANA contends that each of the asserted claims of U.S. Patent No. 8,816,651 (the “651 Patent”) are invalid, on the bases that:

1. Each of the asserted claims, namely claims 1, 4, 8-19, 22, 26-36 are each invalid under 35 U.S.C. § 102 as anticipated by one or more items of prior art; and
2. Each of the asserted claims, namely claims 1, 4, 8-19, 22, 26-36 are each invalid under 35 U.S.C. § 103 as obvious to a person of ordinary skill in the art at the time the alleged invention was made (“POSITA”) based on one or more items of prior art.
3. Each of the asserted claims, namely claims 1, 4, 8-19, 22, 26-36 are each invalid under 35 U.S.C. § 112 as indefinite under 35 U.S.C. § 112(b), and lack enablement and lack written description under 35 U.S.C. § 112(a).

As set forth in greater detail herein and in the attachments and exhibits to this disclosure of Defendant ANA’s Preliminary Invalidity Contentions, each of the asserted claims are invalid for one or more bases.

**Anticipation.** Each of the asserted claims, namely claims 1, 4, 8-19, 22, 26-36 are each anticipated under 35 U.S.C. § 102 by each of the following:

- U.S. Patent Publ. No. 2014/0150407 – (**Van Niekerk**) (**Exhibit 1**)

- U.S. Patent No. 6,422,001 – **(Sherman) (Exhibit 2)**
- U.S. Patent Publication No. 2003/0224833 – **(Egan) (Exhibit 3)**
- Deep Sea Electronics DSE7200/7300 Series Operators Manual, Document Number 057-074, Issue 13 (October 6, 2011) – Printed Publication – **(DSE Operators Manual 13) (Exhibit 4)**
- Deep Sea Electronics PLC control module Deep Sea Electronics DSE7200/7300 Series Control Module for engine and generator sets and dummy load control, was prior art on-sale, public use, and/or otherwise available to the public (hereinafter “prior art activities”) from at least 2008 and later, including at least from October 2009 and at least October 6, 2011 and onward, and including prior art activities through a number of companies in the United States, by Deep Sea Electronics PLC having a global headquarters at Highfield House, Hunmanby, North Yorkshire, YO14 0PH England – (DSE 7300 Controller) (see **Exhibit 4, Exhibit 12** (ANA0001070-1073), **Exhibit 13** (ANA0005605-5613)). Companies purchasing and/or publicly using the DSE controller, including companies in the United States, include those listed in **Exhibit 14** (ANA0005592-5604). **(DSE 7300 Controller prior art activities)**

Defendant identifies the previously listed prior art now known to Defendant to anticipate the asserted claims 1, 4, 8-19, 22, 26-36) of the '651 patent, either expressly or inherently as understood by a person having ordinary skill in the art, depending on the Court's interpretation of the claims. Each of these prior art patents, publications, and systems anticipates the asserted claims, as disclosed below and in the charts of Attachments A – F. In some instances, Defendant has treated certain prior art as anticipatory, where certain elements are explicitly or inherently present based on Plaintiff's apparent claim construction in Plaintiff's infringement contentions.

**Obviousness.** To the extent that it is argued the above references do not anticipate, Defendant contends that each of the asserted claims, namely claims 1, 4, 8-19, 22, 26-36 are each rendered obvious under 35 U.S.C. § 103 by one or more of the following, alone or in combination:

- U.S. Patent Publication No. 2014/0150407 – (**Van Niekerk**) (**Ex. 1**)
- U.S. Patent No. 6,422,001 – (**Sherman**) (**Ex. 2**)
- U.S. Patent Publication No. 2003/0224833 – (**Egan**) (**Exhibit 3**)
- Printed Publication – Deep Sea Electronics DSE720/7300 Series Operators Manual, Document Number 057-074, Issue 13 (October 6, 2011) – (**DSE Operators Manual 13**) (**Ex. 4**)

- Deep Sea Electronics PLC control module Deep Sea Electronics DSE720/7300 Series Control Module for engine and generator sets and dummy load control, was prior art on-sale, public use, and/or otherwise available to the public (hereinafter “prior art activities”) from at least 2008 and later, including at least from October 2009 and at least October 6, 2011 and onward, and including prior art activities through a number of companies in the United States, by Deep Sea Electronics PLC having a global headquarters at Highfield House, Hunmanby, North Yorkshire, YO14 0PH England – (DSE 7300 Controller) (see **Exhibit 4**, **Exhibit 12** (ANA0001070-1072), **Exhibit 13** (ANA0005605-5613)). Companies purchasing and/or publicly using the DSE controller, including companies in the United States, include those listed in **Exhibit 14** (ANA0005592-5604). (**DSE 7300 Controller prior art activities**)
- U.S. Patent Publication No. 2012/0003131 – (**Ibrahim**) (**Exhibit 5**)
- Japanese Patent Publication JP2000-162291A – (**Miyoshi**)(**Exhibit 6**)
- Japanese Patent Publication JP2011-127518A – (**Masuda**)(**Exhibit 7**)
- U.S. Patent No. 6,838,781 – (**van de Loo**) (**Exhibit 8**)
- U.S. Patent No. 6,865,883 – (**Gomulka**) (**Exhibit 9**)
- U.S. Patent No. 9,470,165 – (**Conrad**) (**Exhibit 10**)

- U.S. Patent No. 6,993,923 – **(Beers) (Exhibit 11)**

Each prior art reference disclosed above, either alone or in combination with other prior art or knowledge of one of ordinary skill in the art, renders the asserted claims invalid as obvious. To the extent that Plaintiff contends that any of the prior art fails to disclose one or more limitations of the asserted claims, Defendant reserve the right to identify other prior art references that, when combined with the prior art, would render the claims obvious despite the allegedly missing limitation. Each anticipatory prior art reference disclosed in the preceding section, either alone or in combination with other prior art, also renders the asserted claims invalid as obvious. In particular, each anticipatory prior art reference may be combined with (1) information known to persons skilled in the art at the time of the alleged invention, (2) any of the other anticipatory prior art references, and/or (3) any of the additional prior art identified below in this section. To the extent that Plaintiff contends that any of the anticipatory prior art fails to disclose one or more limitations of the asserted claims, Defendant reserves the right to identify other prior art references that, when combined with the anticipatory prior art, would render the claims obvious despite the allegedly missing limitation. Defendant's contention that the anticipatory prior art references may be combined to render the asserted claims of the '651 patent obvious under 35 U.S.C. § 103 is not an

admission or suggestion that the references do not independently anticipate or render obvious the asserted claims. Moreover, in addition to the below combinations, one of ordinary skill in the art would have arrived at the claimed invention based on the primary references disclosed below and in the charts of **Attachments A – F**. In addition to the reference prior art of **Exhibit 1-11**, the state of the art and knowledge of a person of ordinary skill in the art is further evidenced by **Exhibits 12-32** and documents identified and produced pursuant to **Miscellaneous Order No. 62 Section 3-4(b), Section III** herein.

**A. U.S. Patent Publication No. 2014/0150407 – (Van Nierkerk)**

U.S. Patent Publication No. 2014/0150407 – (the ‘407 Publ. or Van Nierkerk) is produced herewith (ANA0000883-895) pursuant to Section 3-4(b). As set forth more fully in the charts of **Attachment A, Attachment E and Attachment F**, Van Nierkerk anticipates the asserted claims and further renders the asserted claims obvious. Van Nierkerk discloses a genset 8 comprising an electrical generator 14 powered by a diesel engine 16. A load bank/exhaust heater 20 (i.e., a resistive load bank 20 producing heat when an electrical load). Van Nierkerk further discloses monitoring a current load via a current transformer 38 coupled to an output bus and a load bank bus. A controller 30 outputs a control signal to a power switch 28 (based on the current load measured by the current transformer 38) to control the application of the load bank 20 on the genset 8. The

control signal is output to the power switch 28 when needed to heat the exhaust gas during regeneration of a DPF filter 24 and when the genset 8 is not connected to an external load. The load bank 20 is disconnected via the power switch 28 when the external load on the genset 8 reaches a cutoff band such that no power is applied to the load bank 20.

**B. U.S. Patent No. 6,422,001 – (Sherman)**

U.S. Patent No. 6,422,001 – (the ‘001 Patent or Sherman) is produced herewith (ANA0000543-552) pursuant to Section 3-4(b). As set forth more fully in the chart of **Attachment B**, Sherman anticipates the asserted claims and further renders the asserted claims obvious. Sherman discloses an engine 12 driving an electrical generator 14. The engine 12 includes a particulate filter 30. An electrical power dissipating resistor 24 (i.e., a load bank) is coupled to the electrical generator 14. A control system 12 including controller 30 is used to monitor and control the engine 12 (via signal path 38). The electrical generator 14 is coupled to the load bank 24 and a load via a power-handling electrical controller 16. Thus, the generator 14 is coupled to both an output bus and a load bank bus (via the power-handling electrical controller 16). The overall controller 26 outputs a control signal to selectively operate the power-handling electrical controller 16. The output signal from the overall controller 26 is used to apply the load bank 24 to the generator 14 to increase engine load during filter regeneration. Load bank

24 application and removal is controlled based on exhaust temperature, engine load, and regeneration cycle.

**C. U.S. Patent Publication No. 2003/0224833 – (Egan)**

U.S. Patent Publication No. 2003/0224833 – (Egan) is produced herewith (ANA0000738-773) pursuant to Section 3-4(b). As set forth more fully in the chart of **Attachment C**, Egan renders the asserted claims obvious in combination with additional prior art. Egan discloses a diesel engine 101 and an alternator 103, with an electrical load 118 (i.e., a load bank) used to increase the load on the engine/alternator 101, 103. A controller 105 is coupled to the engine 101 and the alternator 103. The controller 105 receives sensor signals from both the engine 101 and the alternator 103 and in turn controls the engine 101 and alternator 103. A load bank bus couples the load bank 118 to the alternator 103 and an output bus (inherently) couples the alternator 103 to a load. A load monitoring device is inherently disclosed by Egan as the application and removal of the load 118 is defined by a load on the alternator 103. Egan discloses the controller 105 enabling and disabling the load bank 118 depending on the alternator's load. The controller 105 enables the load bank 118 to avoid carbon deposits inside the exhaust manifold 115 on the engine 101 in the case of continuous no load or almost no load operation. Will load generator 103 when real load is below a lower threshold and will remove the load bank 118 when the total load is above an upper threshold.

#### **D. DSE Operators Manual 13**

DSE Operators Manual 13 is produced herewith (ANA0001288-1447) pursuant to Section 3-4(b). As set forth more fully in the chart of **Attachment D**, DSE Operators Manual 13 anticipates the asserted claims and further renders the asserted claims obvious. As disclosed in DSE Operators Manual 13, the DSE7320 Control Module for Generator Sets is designed and configured to provide the controls for an engine and generator (alternator) gen-set with a static load bank (aka “dummy load”) function, and in particular for a diesel engine gen-set. The DSE7320 module monitors the engine. The disclosed DSE7320 module had the same number of inputs and outputs as Multiquip now alleges are read on by and infringe the Asserted Claims. A POSITA would know and understand that a substantial number of such prior art diesel engine gen-sets controlled by the DSE7320 module would be equipped with a diesel particulate filter (DPF), that prior to the filing of the ‘651 Patent virtually all such diesel gen-sets would be equipped with Tier IV engines, and that the DSE7320 module was CAN interface equipped as standard and compatible with the SAE J1939 protocol. Diesel gen-sets prior to the filing of the ‘651 Patent all included other types of filters such as those that Multiquip now alleges are read on by and infringe the Asserted Claims. As controlled by the DSE7320 module, when the generator loading falls below the Dummy Load Control Trip setting for a determined time interval, the dummy load

is sequentially switched in in selected stages. When the generator loading rises above the Dummy Load Return level for a determined time interval, the dummy load is removed in selected stages.

#### **E. DSE 7300 Control Prior Art Activities**

Disclosure materials for DSE 7300 Controller as prior art on-sale, public use, or otherwise available to the public (hereinafter “prior art activities”) are produced herewith (ANA0001288-1975; ANA0001066-1069; ANA0001070-1073; ANA0001076-1178; ANA0001179-1287; ANA0001448-1569; ANA0001570-1761; ANA0001762-1975; ANA0001976-2206; ANA0005605-5613; ANA0005592-5604; ANA0005747-5791) pursuant to Section 3-4(b). As set forth more fully in the chart of **Attachment D**, DSE 7300 Controller prior art activities anticipates the asserted claims and further renders the asserted claims obvious. The DSE7320 Control Module for Generator Sets on-sale, in public use and otherwise available to the public was designed and configured to provide the controls for an engine and generator (alternator) gen-set with a static load bank (aka “dummy load”) function, and in particular for a diesel engine gen-set. The DSE7320 module monitors the engine. The prior art DSE7320 module had the same number of inputs and outputs as Multiquip now alleges are read on by and infringe the Asserted Claims. A POSITA would know and understand that a substantial number of such prior art diesel engine gen-sets controlled by the DSE7320 module would

be equipped with a diesel particulate filter (DPF), that prior to the filing of the '651 Patent virtually all such diesel gen-sets would be equipped with Tier IV engines, and that the DSE7320 module was CAN interface equipped as standard and compatible with the SAE J1939 protocol. Diesel gen-sets prior to the filing of the '651 Patent all included other types of filters such as those that Multiquip now alleges are read on by and infringe the Asserted Claims. As controlled by the DSE7320 module, when the generator loading falls below the Dummy Load Control Trip setting for a determined time interval, the dummy load is sequentially switched in in selected stages. When the generator loading rises above the Dummy Load Return level for a determined time interval, the dummy load is removed in selected stages.

**F. U.S. Patent Publication No. 2012/0003131 – (Ibrahim)**

U.S. Patent Publication No. 2012/0003131 – (Ibrahim) is produced herewith (ANA0000844-860) pursuant to Section 3-4(b). As set forth more fully in the chart of **Attachment E**, Ibrahim renders the asserted claims obvious in combination with additional prior art. Ibrahim discloses a diesel engine 100 coupled to an alternator 145. The generator or alternator 145 transfers electrical power to an electrically conductive mesh (a resistive load bank) 400. An auxiliary exhaust treatment device 130 includes an SCR. A filter/heater/electrical load/silencer apparatus 200 (that includes the load bank 400) includes a particulate filter. Power

from the alternator 145 is transferred to the load via an output bus 150, while power is also transferred to the load bank 400 via a load bank bus 150. A control circuit 510 controls the flow of electricity through the mesh 400 by controlling the operation of a switch 520 coupled between the alternator 145 and the load bank 400. The resistive mesh or resistive load bank is used to apply a load on the generator 145 and engine 100 when the generator 145 is insufficiently loaded, such that the mesh 400 dissipates the electrical output of the generator 145. The control of the flow of electricity through the mesh 400 (i.e., a resistive load bank) is controlled via control signals transmitted by a microprocessor control module 530 on a signal cable 540. Such control signals are used to apply a load (from the resistive mesh 400) when the generator 145 is insufficiently loaded.

**G. Japanese Patent Publication JP2000-162291A – (Miyoshi)**

Japanese Patent Publication JP2000-162291A – (Miyoshi) is produced herewith (ANA0000299-317) pursuant to Section 3-4(b). As set forth more fully in the chart of **Attachment F**, Miyoshi renders the asserted claims obvious in combination with additional prior art. Miyoshi discloses a genset 6 coupled to a load bank 1. An output of the genset 6 is coupled to an input of the load bank 1. A programmable controller, coupled to a control circuit 11, controls the operation of the load bank 1. A control signal from the control circuit 11 controls the operations of the load bank 1 by controlling the operation of a series of

electromagnetic contactors M1-M8 (i.e., load contactors). The contactors M1-M8 allow for the selection of a series of resistors R1-R8.

#### **H. Japanese Patent Publication JP2011-127518A – (Masuda)**

Japanese Patent Publication JP2011-127518A – (Masuda) is produced herewith (ANA0005681-5717) pursuant to Section 3-4(b). As set forth more fully in the charts of **Attachments A-F**, Masuda renders the asserted claims obvious in combination with additional prior art. Masuda discloses a diesel engine 70 with an exhaust manifold 71 that includes a diesel particulate filter 50. The engine 70 includes an ECU 70, which includes an ECU 11 that operates a fuel injection valve 119 of each cylinder of the engine 70. The ECU 11 is a CPU that executes various arithmetic processes and controls, includes an EEPROM that stores control programs and data, a flash memory, a RAM that temporarily stores control programs and data, a CAN controller, and an input/output interface, and is coupled to the engine 70 (Paras. [0017], [0021], and [0031]).

#### **I. U.S. Patent No. 6,838,785 - (van de Loo)**

U.S. Patent No. 6,838,785 – (the ‘785 Patent or van de Loo) is produced herewith (ANA0000553-567) pursuant to Section 3-4(b). As set forth more fully in the charts of **Attachments A-F**, van de Loo renders the asserted claims obvious in combination with additional prior art. van de Loo discloses an engine 10 coupled to an alternator 100 that is coupled to a dummy load (i.e., a load bank) 122 to vary

the load on the alternator 100 and engine 10 (Col. 6, lines 47-67). The dummy load 122 is used to maintain a constant total electrical load (dummy load combined with a real load). (Col. 7, line 10 to Col. 8, line 25).

**J. U.S. Patent No. 6,865,883 - (Gomulka)**

U.S. Patent No. 6,865,883 – (the ‘883 Patent or Gomulka) is produced herewith (ANA0000583-587) pursuant to Section 3-4(b). As set forth more fully in the charts of **Attachments A-F**, Gomulka renders the asserted claims obvious in combination with additional prior art. Gomulka discloses the use of an electrical load 30 (comprising electrical heating elements 32) on an engine 10 to increase the load on the engine 10 and increase exhaust gas temperatures during regeneration. Also discloses the use of an ECM 14 for controlling the operation of the engine 10. An exhaust system also includes a particulate filter 20. (see at least Col. 1: 57-63; Col. 2: 2-4 and 53-55; and Col. 3: 51-61).

**K. U.S. Patent No. 9,470,165 - (Conrad)**

U.S. Patent No. 9,470,165 – (the ‘165 Patent or Conrad) is produced herewith (ANA0000666-673) pursuant to Section 3-4(b). As set forth more fully in the charts of **Attachments A-F**, Conrad renders the asserted claims obvious in combination with additional prior art. Conrad discloses applying an electrical load from a load bank 20 to a generator 24 and thereby increase the load on an engine 12 to increase its exhaust gas temperatures for filter regeneration 10 (includes a

filter arrangement 16). A controller 22 is in electrical communication with the load bank 20 and the engine 12 and controls the operation of the load bank 20 and the operation of the engine 12. (see at least Col. 4, line 3 to Col. 5, line 36).

**L. U.S. Patent No. 6,993,923 - (Beers)**

U.S. Patent No. 6,993,923 – (the ‘923 Patent or Beers) is produced herewith (ANA0000588-606) pursuant to Section 3-4(b). As set forth more fully in the charts of **Attachments A-F**, Beers renders the asserted claims obvious in combination with additional prior art. Beers discloses maintaining a minimum (physical) load on a diesel engine/generator 12 through the use of a load bank 16 (i.e., in-line resistive water heaters 62, 63, 64) to avoid harmful effects of no-load or low-load operation of diesel engine (see at least Col. 4: 24-30 and 40-43; Col. 5: 14-23 and 39-47; and Col. 6: 45-63).

As set forth below, the prior art references when considered alone or in combination render the asserted claims obvious and invalid under 35 U.S.C. § 103. Additional prior art identified in **III Section 3-4(b) Documentation** reflects the knowledge of a person of ordinary skill in the art and supports the suggestion to combine the references.

| <b>Reference</b>                                     | <b>Additional Reference</b>                                                                      |
|------------------------------------------------------|--------------------------------------------------------------------------------------------------|
| Exhibit 1 - Van Niekerk<br>- Alone or in Combination | Exhibit 2 – Sherman<br>Or<br>Exhibit 3 – Egan<br>Or<br>Exhibit 4 - DSE Operators Manual 13<br>Or |

|                                                  |                                                                                                                                                                                                                                                                                                 |
|--------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                  | Exhibit 8 van de Loo<br>Or<br>Exhibit 7 Masuda<br>Or<br>Exhibit 6 Miyoshi<br>Or<br>Exhibit 8 van de Loo<br>Or<br>Exhibit 9 Gomulka<br>Or<br>Exhibit 10 Conrad<br>Or<br>Exhibit 11 Beers                                                                                                         |
| Exhibit 2 – Sherman<br>- Alone or in Combination | Exhibit 1 – Van Niekerk<br>Or<br>Exhibit 3 – Egan<br>Or<br>Exhibit 4 - DSE Operators Manual 13<br>Or<br>Exhibit 8 van de Loo<br>Or<br>Exhibit 7 Masuda<br>Or<br>Exhibit 6 Miyoshi<br>Or<br>Exhibit 8 van de Loo<br>Or<br>Exhibit 9 Gomulka<br>Or<br>Exhibit 10 Conrad<br>Or<br>Exhibit 11 Beers |
| Exhibit 3 – Egan<br>- Alone or in Combination    | Exhibit 1 – Van Niekerk<br>Or<br>Exhibit 2 – Sherman<br>Or<br>Exhibit 4 - DSE Operators Manual 13<br>Or<br>Exhibit 8 van de Loo<br>Or<br>Exhibit 7 Masuda<br>Or<br>Exhibit 6 Miyoshi<br>Or                                                                                                      |

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|-----------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                       | Exhibit 8 van de Loo<br>Or<br>Exhibit 9 Gomulka<br>Or<br>Exhibit 10 Conrad<br>Or<br>Exhibit 11 Beers                                                                                                                                                                            |
| Exhibit 4 - DSE Operators Manual 13<br>- Alone or in Combination      | Exhibit 1 - Van Niekerk<br>Or<br>Exhibit 2 – Sherman<br>Or<br>Exhibit 3 – Egan<br>Or<br>Exhibit 8 van de Loo<br>Or<br>Exhibit 7 Masuda<br>Or<br>Exhibit 6 Miyoshi<br>Or<br>Exhibit 8 van de Loo<br>Or<br>Exhibit 9 Gomulka<br>Or<br>Exhibit 10 Conrad<br>Or<br>Exhibit 11 Beers |
| DSE 7300 Controller prior art activities<br>- Alone or in Combination | Exhibit 1 - Van Niekerk<br>Or<br>Exhibit 2 – Sherman<br>Or<br>Exhibit 3 – Egan<br>Or<br>Exhibit 8 van de Loo<br>Or<br>Exhibit 7 Masuda<br>Or<br>Exhibit 6 Miyoshi<br>Or<br>Exhibit 8 van de Loo<br>Or<br>Exhibit 9 Gomulka<br>Or<br>Exhibit 10 Conrad<br>Or                     |

The asserted claims are obvious under 35 U.S.C. § 103 in view of the above prior art and as disclosed in Attachments A-F hereto. The United States Supreme Court in *KSR Int’l Co. v. Teleflex Inc.*, 127 S. Ct. 1727 (2007) emphasized that inventions arising from ordinary innovation, ordinary skill, or common sense should not be patentable. *Id.* at 1732, 1738, 1742-1743, 1746. In that regard, a patent claim may be obvious if the combination of elements was obvious to try or if there existed at the time of the invention a known problem for which there was an obvious solution encompassed by the patent’s claims. In addition, when a work is available in one field of endeavor, design incentives and other market forces can prompt variations of it, either in the same field or a different one. If a person of ordinary skill can implement a predictable variation, Section 103 likely bars its patentability. *Id.* at 1740. In particular, the Court stated that courts should “look to interrelated teachings of multiple patents; the effects of demands known to the design community or present in the marketplace; and the background knowledge possessed by a person having ordinary skill in the art, all in order to determine whether there was an apparent reason to combine the known elements in the fashion claimed by the patent at issue.” *Id.* at 1740-41. Moreover, *KSR* does not mandate evidence of a motivation or suggestion to combine prior art references. *See TGIP, Inc. v. AT&T Corp.*, 527 F. Supp. 2d 561, 580 (E.D. Tex. 2007). “[A]

court can take account of the inferences and creative steps that a person of ordinary skill in the art would employ” to resolve the question of obviousness. *KSR*, 127 S. Ct. at 1741.

A consideration of the *KSR* obviousness factors leads to the conclusion that the '651 patent is invalid for obviousness. It would have been obvious to one of ordinary skill in the art to combine the teachings of the prior art references discussed above and charted in the appendices to arrive at the claimed subject matter of the '651 Patent. Moreover, one of ordinary skill in the art would have been motivated to combine these references because the nature of the known problems of generator sets, including the problem of avoiding and addressing wet stacking and optimum operation of a generator set.

### **Written Description, Enablement, and Indefiniteness**

The Asserted Claims of the '651 Patent are invalid for lack of written description and/or enablement under 35 U.S.C. § 112, ¶ 1, and for failing to particularly point out and distinctly claim the subject matter that the applicant regards as his invention under 35 U.S.C. § 112, ¶ 2. Defendant reserves the right to supplement these Invalidity Contentions to further identify bases for invalidity under 35 U.S.C. § 112, ¶¶ 1 & 2. Pursuant to Miscellaneous Order No. 62 Section 3-3(a)(4), Defendant lists below the grounds upon which the asserted claims are invalid under 35 U.S.C. § 112, or based on Defendant's current understanding of

Plaintiff's proposed claim constructions and infringement contentions. To the extent that Plaintiff contends that the proper construction of any claim term in the '651 Asserted Claims is broader than what is supported by the specification of the '651 Patent, the patent specification would not sufficiently describe such term, as a part of the alleged invention of the '651 patent, such that one skilled in the art could clearly conclude that the inventor invented what was claimed. In such case, any such claim would be invalid for lack of written description. Furthermore, in the same scenario, the specification would not provide enough for one skilled in the art to practice the alleged invention without undue experimentation, and any such claim would be invalid for lack of enablement. Finally, the scope of the alleged invention defined any such claim term could not be ascertained with reasonable clarity by one skilled in the art. Thus, the claim term would be indefinite.

### **Lack of Written Description**

“‘[T]o fulfill the written description requirement, the patent specification must describe an invention in sufficient detail that one skilled in the art can clearly conclude that the inventor invented what is claimed.’” *Kao*, 441 F.3d at 967-68 (citation omitted); *see also Univ. of Rochester*, 358 F.3d at 922-23. “[E]nough [of the invention] must be included to convince a person of skill in the art that the inventor possessed the invention . . . .” *LizardTech*, 424 F.3d at 1345 (Fed. Cir. 2005). “[T]he test requires an objective inquiry into the four corners of the

specification from the perspective of a person of ordinary skill in the art. Based on that inquiry, the specification must . . . show that the inventor actually invented the invention claimed.” *Ariad Pharm.*, 598 F.3d at 1351.

Claim 1 and its dependent claims and claim 19 and its dependent claims fail to meet the written description requirement of section 112(1), among other reasons, because one skilled in the art could not clearly conclude that the inventor possessed an invention that included one or more of the following terms:

- “a particulate filter”: The portions of the written description that relate to this limitation are specific and limited to an engine particulate filter that oxidizes particulates via regeneration, such as a diesel particulate filter or DPF, and there is no other description or disclosure directed to or disclosing any other type of equipment or component. E.g. ‘651 Patent: Abstract; col. 1:33-58; col. 3:34-43; col. 4:66-67; col.5:54-58; col. 6:1-12; col. 6:23-24; col. 7:23-26. One of ordinary skill in the art would not recognize the specification as demonstrating the inventor’s possession of the claim limitation to the extent it is construed as encompassing a structure other than an engine particulate filter that oxidizes particulates via regeneration, or the claim limitation as applied by Plaintiff to encompass systems of Defendant that are not an

engine exhaust particulate filter that oxidizes particulates via regeneration; or

- “in at least one of the following cases: neglect”: The portions of the written description that relate to this limitation are limited to operation of a generator set below a pre-set load condition that is sub optimal such that wet-stacking and soot build up are likely to occur and operated at such sub-optimal condition for a sufficient period of time that wet-stacking and soot build up is likely to occur. There is no other description or disclosure directed to or disclosing any other type of process or method, equipment or component. E.g. ‘651 Patent: Abstract; col. 2:50-3:33; col. 6:40-44; col. 7:28-30. One of ordinary skill in the art would not recognize the specification as demonstrating the inventor’s possession of the claim limitation to the extent it is construed as encompassing a process, treatment or activation of a load bank other than as a response to the operation of a generator set being neglected by operation at such sub-optimal condition for a sufficient duration of time that wet-stacking and soot build up is likely to occur, or the claim limitation as applied by Plaintiff to encompass systems of Defendant that do not include such an operation or use of such an operation to enable a load bank. Moreover, although the written

description is clear that in the “neglect case” an equipped generator is allowed to run in a sub-optimal state until such time as wet stacking and soot build up are likely to occur, the specification does not provide a written description and enabling disclosure as to how to determine, define or understand the sub-optimal conditions and time under which “wet stacking and soot build up are likely to occur” sufficient to qualify as a “neglect case” within the meaning of the patent. This includes because the patent specifically discusses restricting the load bank to operation in a neglect case to save fuel whereby the generator is allowed to operate in a sub-optimal state until such time as wet stacking and soot build up are likely to occur. The entirety of the disclosure of the specification states that, “[t]he load window and duration variables necessary for determining a neglect scenario will thus be based on manufacturer or user-defined values directed at pinpointing the time when wet stacking and soot build up is likely to begin.” In addition to the lack of written description and lack of an enabling disclosure regarding a “neglect case”, claims 1 and 19 that claim operation in such “neglect case” are indefinite, including due to the lack of an enabling disclosure thereon; or

- “in at least one of the following cases: ...regeneration”: The portions of the written description that relate to this limitation are specific and limited to the dosing of a diesel engine particulate filter or DPF with diesel fuel and then igniting the diesel fuel to burn-off accumulated soot. There is no other description or disclosure directed to or disclosing any other type of process or method, equipment or component. E.g. ‘651 Patent: Abstract; col. 1:33-58; col. 2:22-28; col. 3:34-43; col. 4:66-67; col. 5:54-58; col. 6:1-12; col. 6:23-24; col. 6:53-58; col. 7:23-30. One of ordinary skill in the art would not recognize the specification as demonstrating the inventor’s possession of the claim limitation to the extent it is construed as encompassing a process, treatment or activation of a load bank other than as a response to the dosing of a diesel engine particulate filter or DPF with diesel fuel and then igniting the diesel fuel to burn-off accumulated soot, or the claim limitation as applied by Plaintiff to encompass systems of Defendant that do not include such an operation or use of such an operation to enable a load bank.

To the extent that claim 1 and/or claim 19 does not meet the written description requirement for any one or more of these claim limitations, all claims

depending from claim 1 and/or claim 19 also do not meet the written description requirement.

## **Enablement**

The “enablement requirement is satisfied when one skilled in the art, after reading the specification, could practice the claimed invention without undue experimentation.” *Sitrick*, 516 F.3d at 999 (citation omitted). Section 112(1)’s enablement requirement requires that “[t]he full scope of the claimed invention must be enabled.” *Id.* “Enabling the full scope of each claim is ‘part of the *quid pro quo* of the patent bargain.’” *Id.* Claim 1 and its dependent claims are not enabled. Claim 19 and its dependent claims are also not enabled. Among other things, the specification fail to enable a generator set and load bank that include one or more of the following terms:

“a particulate filter” other than an engine exhaust particulate filter that oxidizes particulates via regeneration, such as a diesel particulate filter or DPF, in claim 1 and its dependent claims and in claim 19 and its dependent claims; or

“in at least one of the following cases: neglect” other than the operation of a generator set below a pre-set load condition that is sub optimal such that wet-stacking and soot build up are likely to occur and operated at such sub-optimal condition for a sufficient period of time that wet-stacking and soot build up is likely to occur. The patent specifically discusses restricting the load bank to

operation in a neglect case to save fuel whereby the generator is allowed to operate in a sub-optimal state until such time as wet stacking and soot build up are likely to occur. The entirety of the disclosure of the specification states that, “[t]he load window and duration variables necessary for determining a neglect scenario will thus be based on manufacturer or user-defined values directed at pinpointing the time when wet stacking and soot build up is likely to begin.” Regarding claim 1 and its dependent claims and claim 19 and its dependent claims, even under the disclosed manner of operation the specification does not provide an enabling disclosure as to how a person of skill in the art is to know when wet-stacking and soot build up is likely to occur sufficient to be a “neglect case” as claimed; or

“in at least one of the following cases: ...regeneration” other than the dosing of a diesel engine particulate filter or DPF with diesel fuel and then igniting the diesel fuel to burn-off accumulated soot, in claim 1 and its dependent claims and in claim 19 and its dependent claims.

The portions of the written description that refer to the above limitations fail to describe how this step actually occurs. In other words, the specification does not disclose any such structure or how such how such treatment, process or activation of a load bank is actually achieved, other than the limited disclosures noted above. There is no additional disclosure on how the above limitations are allegedly achieved. One of ordinary skill in the art could not actually practice any other

structure, treatment or activation of a load bank based on the disclosure of the specification other than as specified above. Therefore, achieving the above limitations of claim 1 and its dependent claims and of claim 19 and its dependent claims would require undue experimentation by a person of ordinary skill in the art because of the inadequacy of the disclosure. For at least these reasons, the patent does not enable the full scope of the invention with respect to claim 1 and its dependent claims and of claim 19 and its dependent claims.

For at least these reasons, the patent does not enable the full scope of the invention with respect to claim 1 and its dependent claims and of claim 19 and its dependent claims.

### **Indefiniteness**

Section 112(2) requires the patent specification to “conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.” Section 112(2) requires “that a patent’s claims, viewed in light of the specification and prosecution history, inform those skilled in the art about the scope of the invention with reasonable certainty.” *Nautilus, Inc. v. Biosig Instruments, Inc.*, 572 U.S. 898, 134 S.Ct. 2120, 2129 (2014). This inquiry “trains on the understanding of a skilled artisan at the time of the patent application.” *Id.* at 2130. The definiteness standard requires “clear notice of what is claimed, thereby appris[ing] the public of what is still open to them.” *Id.*

at 2129. A claim does not satisfy this requirement simply because “a court can ascribe *some* meaning to a patent’s claims.” *Id.* at 2130. “The claims, when read in light of the specification and the prosecution history, must provide objective boundaries for those of skill in the art.” *Interval Licensing LLC v. AOL, Inc.*, 766 F.3d 1364, 1371 (Fed. Cir. 2014) (citing *Nautilus*, 134 S.Ct. at 2130 & n. 8 (there is an indefiniteness problem if the claim language “might mean several different things and no informed and confident choice is available among the contending definitions.”)).

Claim 1 and its dependent claims and claim 19 and its dependent claims are indefinite. Among other things, the asserted claims fail the requirements of section 112(2) because each of the following claim limitations are indefinite:

“a particulate filter”; or

“in at least one of the following cases: neglect”; or

“in at least one of the following cases: ...regeneration”.

## **II. Section 3-4(a) Documentation**

The following documents are produced herewith pursuant to Miscellaneous Order No. 62, Section 3-3(a): ANA0001059-1063; ANA0001064-1065; ANA0001762-1975; ANA0001976-2206; ANA0002207-2208; ANA0003944-3945; ANA0003946-3990; ANA0003991-4071; ANA0004148-4223; ANA0004300-4390; ANA0004391-4392; ANA0004393-4466; ANA0004467-4498; ANA0004499-4500; ANA0004501-4580; ANA0004661-4699; ANA0004700-4701; ANA0004702-4781; ANA0004862-4899;

ANA0004900-4901; ANA0004902-5047; ANA0005048-5084; ANA0005085-5086;  
ANA0005087-5162; ANA0005163-5199; ANA0005200-5201; ANA0005202-5280;  
ANA0005361-5399; ANA0005400-5415; ANA0005416-5432; ANA0005433-5445;  
ANA0005446-5460; ANA0005461-5474; ANA0005475-5491; ANA0005492-5504;  
ANA0005505-5521; ANA0005522; ANA0005928-5987; ANA0005988-6017; ANA0006018-  
6021; ANA0006022-6025; ANA0006026-6029; ANA0006030-6033; ANA6034-6037.

### **III. Sections 3-3(a)(1) and 3-4(b) Documentation**

The following documents are produced herewith pursuant to Miscellaneous Order No. 62, Sections 3-3(a)(1) and 3-4(b): **Van Niekerk (Exhibit 1)** (ANA0000883-895); **Sherman (Exhibit 2)** (ANA0000543-552); **Egan (Exhibit 3)** (ANA0000738-773); **DSE Operators Manual 13 (Exhibit 4)** (ANA0001288-1447); **Ibrahim (Exhibit 5)** (ANA0000844-860) ; **Miyoshi (Exhibit 6)** (ANA0000299-317); **Masuda (Exhibit 7)** (ANA0005681-5717); **van de Loo (Exhibit 8)** (ANA0000553-567); **Gomulka (Exhibit 9)** (ANA0000583-587); **Conrad (Exhibit 10)** (ANA0000666-673); **Beers (Exhibit 11)** (ANA0000588-606). In addition, disclosure materials for **DSE 7300 Control** prior art activities include **(Exhibit 4)** (ANA0001288-1447), **Exhibit 12** (ANA0001070-1072), **Exhibit 13** (ANA0005605-5613), **Exhibit 14** (ANA0005592-5604); and **Exhibit 33** (ANA0005747-5791). Additionally produced disclosure materials pursuant to Miscellaneous Order No. 62, Sections 3-3(a)(1) and 3-4(b) further include (ANA0001066-1069); (ANA0001076-1178); (ANA0001179-1287);

(ANA0001448-1569); (ANA0001570-1761); (ANA0001762-1975);  
(ANA0001976-2206); (ANA0005546-5549); (ANA0005592-5604). Further  
disclosure materials pursuant to Miscellaneous Order No. 62, Sections 3-3(a)(1)  
and 3-4(b) and exemplary of the state of the art prior to the effective filing date of  
the '651 Patent, including such widely known information such as Tier IV diesel  
engine gen-set requirements, SAE J1939 protocols, and conditions related to wet  
stacking of diesel generators and the avoidance and treatment of wet stacking are  
produced herewith as: **Exhibit 15** (ANA0005614-5623); **Exhibit 16**  
(ANA0005624-5631); **Exhibit 17** (ANA0005632-5641); **Exhibit 18**  
(ANA0005642-5651); **Exhibit 19** (ANA0005551-5552); **Exhibit 20**  
(ANA0005662-5664); **Exhibit 21** (ANA0005652-5661); **Exhibit 22**  
(ANA0005665-5666); **Exhibit 23** (ANA0005667-5673); **Exhibit 24**  
(ANA0005674); **Exhibit 25** (ANA0005675-5677); **Exhibit 26** (ANA0005679);  
**Exhibit 27** (ANA0005680); **Exhibit 28** (ANA0005738-5746); **Exhibit 29**  
(ANA0005732-57370); **Exhibit 30** (ANA0005729-5731); **Exhibit 31**  
(ANA0005718-5728); **Exhibit 32** (ANA0000946-949); (ANA0005881-5887);  
(ANA0005888-5889); (ANA0005890-5896); (ANA0005897-5927);  
(ANA0006038-6046); (ANA0006047-6048); (ANA0006049-6053);  
(ANA0006054-6062); (ANA0006063-6070); (ANA0006071-6078);  
(ANA0006079-6082); (ANA0006083-6085); (ANA0006086-6087);

(ANA0006088); (ANA0006089-6097); (ANA0006098-6099); (ANA0006100-6106).

Defendant reserves the right to supplement or amend these disclosures as may be appropriate.

Respectfully submitted.

Dated: May 8, 2023

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CERTIFICATE OF SERVICE

I hereby certify that a true and correct copy of the foregoing document was served upon Plaintiffs' attorney on May 8, 2023 via email to:

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/s/ Terence J. Linn  
\_\_\_\_\_  
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