

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

MULTIQUIP INC.,

Multiquip,

v.

ANA, INC.,

ANA.

§
§
§
§
§
§
§
§
§
§

CIVIL ACTION NO. 3:22-cv-2599

JURY TRIAL DEMANDED

PLAINTIFF'S OPENING CLAIM CONSTRUCTION BRIEF

TABLE OF CONTENTS

I. THE '651 PATENT 1

II. CONSTRUCTION OF CLAIM TERMS ON WHICH THE PARTIES AGREE 1

III. DISPUTED TERMS..... 1

 A. “particulate filter” (1,19) 1

 B. “neglect” (1,19) 4

 C. “electrical communication” (1,19) 7

 D. “load step resistor” (1, 3, 4, 10, 11, 13, 14, 19, 22, 28, 29, 31, 32, 34, 35, 36)..... 9

 E. “a generator controller comprising a load dump output and a load enable output” (1)
 10

 F. “a load bank controller comprising a load enable input, a load dump input, a load
 sensor” (1)..... 11

TABLE OF AUTHORITIES

Cases

Novelaire Techs., L.L.C. v. Munters AB,
No. 13 CIV. 472 CM, 2013 WL 8508578 (S.D.N.Y. Nov. 21, 2013) 9

Phillips v. AWH Corp.,
415 F.3d 1303 (Fed. Cir. 2005) 3, 5

Plaintiff Multiquip Inc. (“Multiquip”) submits the following opening claim construction brief and evidence supporting its constructions of the disputed claim terms for US Patent No. 8,816,651 (the “’651 Patent”).

I. THE ’651 PATENT

The ’651 Patent discloses an innovative “engine-generator with load bank and control system.” The invention employs a specialized controller to automatically add or subtract resistive load from a load bank to ensure that total load on the generator remains within preset minimum and maximum limits. Maintaining total generator load within these limits prevents “wet-stacking” (i.e. soot build-up in the engine exhaust) by keeping exhaust temperature at desired levels. The invention thereby allows the engine-generator to operate more efficiently over its service lifespan by decreasing (or altogether eliminating) the frequency of regeneration cycles that would otherwise be needed to periodically clean the exhaust system to ensure compliance with EPA emissions standards.

II. CONSTRUCTION OF CLAIM TERMS ON WHICH THE PARTIES AGREE

The parties have agreed on the following construction:

Claim Term	Agreed Construction
regeneration (1, 19)	a process in which an engine doses a particulate filter with diesel fuel then ignites the diesel fuel to burn off accumulated soot

III. DISPUTED TERMS

A. “particulate filter” (1,19)

Plaintiff’s Proposed Construction	Defendant’s Proposed Construction
component used to reduce particles or particulate matter from the exhaust stream of an engine	A filter located in the exhaust system that captures soot from the engine exhaust, to be burned off via regeneration.

The purpose of a particulate filter is to reduce particles or particulate matter from the exhaust stream. *See e.g.*, Macmillan Dictionary (2015)¹ and Oxford Learner’s Dictionary (2014).² In the context of exhaust streams of engines, some particulate filters accomplish this only by “capturing” particulate matter (without burning off the captured particles). *See e.g.*, Non-Regenerative Filters.³ Some particulate filters accomplish this only by “burning off” particulate matter (without first capturing the particles). *See e.g.*, Diesel Oxidation Catalyst or DOC Filters.⁴ Some particulate filters accomplish this by “capturing” particles and then “burning off” the captured particles. *See e.g.*, Regenerative Filters.⁵

Using extrinsic expert testimony, Defendant attempts to limit a “particulate filter” to not only a particular type of filter (namely “diesel particulate filters” or DPFs), but also to further limit to only subcategories of DPFs that both “capture” and then “burn off” particulate matter. *See* Straub Decl. ¶ 64 (Ex. A) (“A POSA would understand that the ‘651 Patent defines the alternative name for the ‘particulate filter’ as being a diesel particulate filter or DPF”). An obvious error in Defendant’s construction is that it renders meaningless dependent claims 8 and 26, which narrow

¹ Multiquip0004951 (Ex. B) (Definition of “Filter”: an object or piece equipment that allows you to remove solid parts that are not wanted from a liquid or gas.);

² Multiquip0004952 (Ex. C) (Definition of “Filter”: device containing paper, sand, chemicals, etc. that a liquid or gas is passed through in order to remove any materials that are not wanted.)

³ United States Patent No. 6,422,001, a reference cited by ANA in their invalidity contentions, describes an example Non-Regenerative Filter (ANA0000543-ANA0000552) (Ex. D) (“Sherman” (“Non-regenerative filters must be cleaned periodically.”).

⁴ *See e.g.*, Everything you need to know about Tier 4 Final (Multiquip0004947-Multiquip0004950) (Ex. E) (Describing DOC and DPF filters for particulate matter); Differences Between DOC, DPF and SCR Filters” (Multiquip0004951) (Ex. B); John Deere Focus on Emissions (Multiquip0004928-Multiquip0004929) (Ex. F) (Describing DOC and DPF “Exhaust Filters” at page 9; and Diesel Oxidation Catalysts: Informational Update (2007) from EPA (Multiquip0004913-Multiquip0004915) (Ex. G) (“Diesel oxidation catalysts verified by EPA and/or CARB are typically effective at removing 20-40 percent of the total particulate matter (PM) mass.”)

⁵ *See e.g.*, What is DFP Regeneration (Multiquip0004937) (Ex. H)

through claim differentiation the engine to a diesel engine: “[t]he engine-generator and load bank system of [claims 1 and 19, respectively] **where the engine is a diesel engine.**” ‘651 Patent at 8:23, 9:28 (emphasis added) (Ex. I). If independent claims 1 and 19 already require a diesel engine with a DPF, dependent claims 8 and 26 do not provide any narrowing of the claims.

Extrinsic evidence, like that offered in the form of Defendant’s expert report, is the least reliable type of evidence for claim construction. *Phillips v. AWH Corp.*, 415 F.3d 1303, 1318 (Fed. Cir. 2005) (“We have viewed extrinsic evidence in general as less reliable than the patent and its prosecution history in determining how to read claim terms, for several reasons.”). The Federal Circuit has recognized that “extrinsic evidence consisting of expert reports and testimony is generated at the time of and for the purpose of litigation and thus can suffer from bias that is not present in intrinsic evidence.” *Id.* Here, it conflicts with the plain language of the patent by rendering patent language meaningless and should be given no weight.

Defendant’s construction is also faulty because it excludes classically recognized filters that remove particulate matter only by “capture” or only by “burn off.” Defendant’s own extrinsic evidence recognizes particular filters that remove particulate matter only by “capture” without utilizing burn-off or regeneration. *See* FN3, *supra*. Extrinsic evidence also recognizes particulate filters that remove particulate matter only by “burn off” without utilizing capture. *See* FN4, *supra*. Nothing in the claim language suggests that these classically recognized particulate filters that function only by capture or only by burn-off do not satisfy the “particulate filter” limitation. The claims require only a “said engine having an engine control module and a particulate filter.” ‘651 Patent at 7:45, 8:60.

Moreover, at the time of the ‘651 Patent, the EPA recognized a variety of particulate filters used in diesel engines for reducing particulate matter. *See* Verified Technologies List for Clean

Diesel and List of Formerly Verified Technologies for Clean Diesel⁶ (citing *e.g.*, DOC, SCR, and DPF systems and PM Reduction for each). Defendant’s proposed construction attempts to exclude most of these particulate filters to not only a DPF, but also a very particular type of DPF. There is no reason to exclude these recognized particulate filters.

While Defendant seeks to exclude most types of particulate filters, there is no unambiguous disclaimer that supports limiting “particulate filter” in the manner proposed by Defendant.

B. “neglect” (1,19)

Plaintiff’s Proposed Construction	Defendant’s Proposed Construction
an operating condition of a generator in which its load for a preset duration of time drops below a preset level at which wet stacking and soot buildup will occur	Invalid as indefinite – but in the alternative: The engine is intentionally allowed to operate in a sub optimal state for more than a short duration until wet stacking and soot build up in the exhaust system will occur.

Defendant bears the burden of proving indefiniteness. Defendant cannot support this burden because the specification repeatedly discusses neglect scenarios, clearly describing “neglect” as a condition in which the generator is operating at or below a “load window” bounded by pre-set lower and upper load levels. *See* ‘651 Patent at 2:50-64; 3:4-13; 7:28-30.

Plaintiff’s proposed definition of “neglect” comes directly from the specification. The specification states, in relevant part:

In accordance with some embodiments of the disclosed technology, the generator and load bank controllers are configured to initiate the load bank **when certain conditions exist**. The load bank is initiated when there is a **“neglect scenario”** or **“neglect case.”** The generator controller, via the load bank controller, monitors the load connected to the generator to ensure that the load is within a “window” or “load window” bounded by **pre-set lower and upper load levels**. If the load connected to the generator remains at or below some pre-set load condition—i.e., below the window—for a pre-set duration, the generator controller signals the load bank controller to initiate the load bank. The load bank controller then increases or decreases the total resistance of the load bank by connecting or disconnecting load step resistors as necessary to maintain the load within window.

⁶ Multiquip0004943-Multiquip0004945 (Ex. J) and Multiquip0004946 (Ex. K).

‘651 Patent at 2:50-64. Defendant’s own proposed definition acknowledges “neglect” is a condition bounded by pre-set lower and upper load levels at which wet stacking and soot buildup will occur.

Despite recognizing the specification’s extensive explanation of neglect scenarios, Defendant’s expert argues that “neglect” is indefinite, claiming “[t]he word ‘neglect’ would connote to a POSA that the engine generator has not been cared for or not operated in the correct manner.” Straub Decl., ¶ 79. He further claims the term “neglect” would “suggest to a POSA that routine maintenance has not been performed, such as changing the oil or similar required maintenance.” *Id.* A POSA could reach such a conclusion only by ignoring plain language in the specification clearly explaining the term “neglect.” This is a prime example of why the Federal Circuit considers extrinsic evidence “unlikely to result in a reliable interpretation of patent claim scope unless considered in the context of the intrinsic evidence.” *Phillips*, 415 F.3d 1303, 1319 (Fed. Cir. 2005).

Indeed, Defendant’s expert later admits that “neglect” *cannot* mean failure to care for or operate in the correct manner because the specification explains otherwise. Straub Decl., ¶ 79. He then argues that “neglect” is nevertheless indefinite because (he claims) “it is understood by those familiar with wet stacking that conditions leading to this condition cannot be ‘pin pointed’ as the patent suggests.” *Id.* at ¶ 80. He further states:

Those knowledgeable about wet stacking understand the process is a complex continuum involving many factors including the engines fuel system and combustion system design and tolerances, the engine calibration, the exhaust systems design, flow rate, and heat transfer characteristics, the fuel properties, the ambient temperature and the general health or condition of the engine during its life.

Id. He concludes that because various factors may affect when wet stacking occurs, a “POSA would not know with reasonable certainty what the scope of [the “neglect”] claim requirement is.” *Id.* at ¶ 81.

The flaw in this argument is that Defendant’s expert demonstrates a clear understanding of what the patent means by a “neglect scenario.” Dr. Straub is not really arguing that the meaning of the word “neglect” is indefinite within the context of the patent and is instead merely pointing out that there are various conditions that could affect the precise “preset level” selected by the operator. Suggesting that this makes the term “neglect” indefinite is akin to arguing that a POSA would not know what “wet stacking” is because various factors affect exactly when wet stacking occurs in a specific situation.

Dr. Straub then goes on to argue that, although a POSA would not know what “neglect” means, ANA’s proposed alternative definition would represent what a POSA would understand “neglect” to mean if a POSA were capable of such understanding. Straub Decl., ¶ 85 (“Although in my opinion a POSA would not know the scope of the term ‘neglect’ as used in the ‘651 Patent, the alternative proposed by ANA in my opinion would represent what a POSA would understand the concepts taught by the patent to be for the neglect case and the circumstances in which a load bank was to be engaged, and would most closely align with those concepts taught by the ‘651 Patent.”).

Demonstrating a surprisingly nuanced opinion of the meaning of a term he claims he does not understand, he argues Plaintiff’s construction is flawed because Plaintiff’s construction “does not include the concept established by the ‘651 Patent that neglect requires the system to be intentionally operated at a sub-optimal state for a period of time in order to save money, and is not

operated for just a short period of time below some threshold load level.” *Id.* This assessment simply ignores Plaintiff’s proposed construction:

an operating condition of a generator in which its load for a preset duration of time drops below **a preset level at which wet stacking and soot buildup will occur**

See Plaintiff’s Proposed Construction (emphasis added). A level at which “wet stacking and soot buildup will occur” is not optimal.

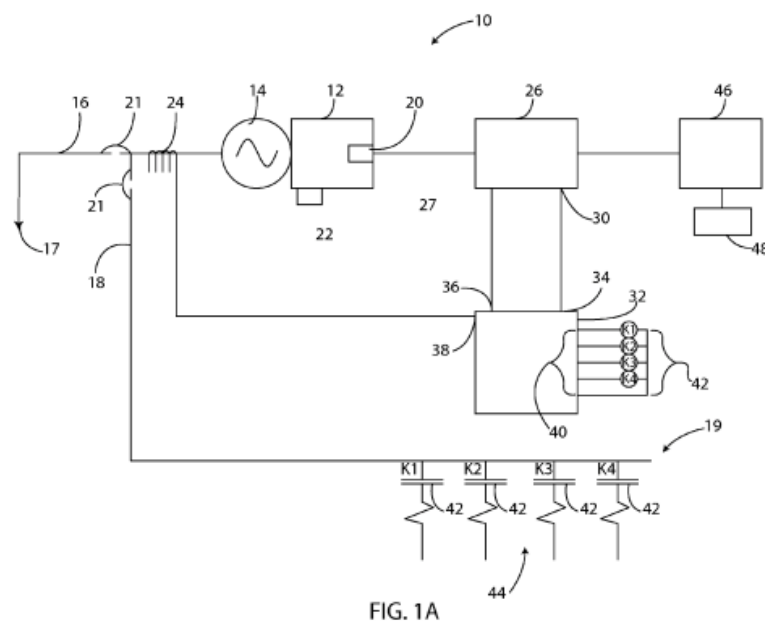
C. “electrical communication” (1,19)

Plaintiff’s Proposed Construction	Defendant’s Proposed Construction
a direct or indirect electrical connection	Configured to allow electrical signals to be sent there between

Claims 1 and 19 recite multiple limitations involving components “in electrical communication with” other components. Defendant’s proposed construction is ambiguous. While Defendant’s proposed construction would clearly encompass two components that are *directly* connected by a continuous electrical conductor (*e.g.* a copper wire that carries electrons from one component to the other), it is *not* clear whether their construction would also encompass two components that are *indirectly* electrically connected (*e.g.* a transmitter and receiver that communicate without sharing electron flow, *e.g.* wirelessly). There is nothing in the plain language of the claims, the specification, or the prosecution history disavowing the claim to require only “direct” electrical communication as suggested by Defendant’s proposed construction.

Plaintiff’s proposed construction of “electrical communication” to include direct or indirect electrical connection is supported by the plain language of the claims and by the specification. For example, Claims 1 and 19 disclose “said alternator in electrical communication with an output bus and a load bank bus.” Figure 1A clearly shows a direct electrical connection between “said alternator” **14** and the “load bank bus” **18**, because the “alternator 14” and the “load bank bus **18**” are directly connected by “the disconnect **21**”, which “could comprise circuit breakers or fused

switches”. ‘651 Patent, 4:54-56. Also, Figure 1A clearly shows an indirect electrical connection between the “device 24” and output and load bank buses 16 and 18. The detailed description explains that at least one “load monitoring device **24**” is “in electrical communication with the output bus 16 and the load bank bus **18**” and that “[i]n a preferred embodiment, the load monitoring device 24 comprises current transformers.” ‘651 Patent, 5:1-7. It is well known in electrical engineering that a “transformer” is “an electrical component consisting of two or more multitrans coils of wire placed in close proximity to cause the magnetic field of one to link to the other; used to transfer electric energy from one or more alternating-current circuits to one or more other circuits by magnetic induction.” McGraw-Hill “Dictionary of Scientific and Technical Terms,” 4th Ed., p. 1954 (1989) (Ex. L). Thus, device 24 is indirectly connected to the buses 16 and 18 by magnetic flux, and so the term “electrical communication” must be construed to include both a direct electrical connection and an indirect electrical connection.



In contrast, here the specification describes indirect communication scenarios, so “in electrical communication with” should be construed to include indirect communication. *Novelair*

Techs., L.L.C. v. Munters AB, No. 13 CIV. 472 CM, 2013 WL 8508578, at *3 (S.D.N.Y. Nov. 21, 2013) (“Had the patentee intended that ‘communication’ be limited to ‘direct communication’ (which is to say, communication without any interruption, or components being adjacent or in physical contact with each other), it undoubtedly would have said so. Furthermore, the specification appears to disclose communication that is indirect. As plaintiff explains, the communication between the heat exchanger and the enthalpy wheel can be interrupted by a flow of by-pass air diverted from the return air stream. This renders the ‘communication’ between the heat exchanger and the enthalpy wheel ‘indirect.’”).

D. “load step resistor” (1, 3, 4, 10, 11, 13, 14, 19, 22, 28, 29, 31, 32, 34, 35, 36)

Plaintiff’s Proposed Construction	Defendant’s Proposed Construction
one of a group of electrical resistors in a load bank that can add or subtract load in an electric circuit	A component that adds a step of resistance in a circuit.

The inclusion of “add or subtract load” in Plaintiff’s proposed definition is supported by the specification, which states that in some embodiments the load bank controller “then increases or decreases the total resistance of the load bank by connecting or disconnecting load step resistors as necessary to maintain the load within window.” ‘651 Patent, 2:61-63. Plaintiff’s proposed language “one of a group” is supported by the same specification language. *Id.* (“connecting or disconnecting load step resistors as necessary . . .”). It is also supported by claim language identifying a “plurality of load step resistors.” *See e.g.*, Claim 4 and 22. The specification also supports Plaintiff’s proposed definition by clearly identifying the resistors as electrical resistors used to add or subtract load in an electric circuit. ‘651 Patent, 5:31-36 (“In a preferred embodiment, there are four (4) load step resistors **44**, each rated 25kW at 480V . . .”).

Defendant’s proposed definition ignores plain language in the patent indicating that a load step resistor can add or subtract load.

E. “a generator controller comprising a load dump output and a load enable output” (1)

Plaintiff's Proposed Construction	Defendant's Proposed Construction
no construction necessary	An electronic controller of the generator that includes two separate output connections, one a load dump output through which a signal is sent to the load bank controller to cause the load bank to disconnect from the generator, and the other a load enable output through which a signal is sent to the load bank controller to connect the load bank to the generator, either entirely or in stages

No construction of this term is necessary. Defendant's proposed “construction” is not a true construction of any claim term and is instead an attempt to add words to Claim 1. Claim 1 states, in relevant part:

a generator controller comprising a load dump output and a load enable output, said generator controller in electrical communication with said engine control module:

Defendant proposes to rewrite this limitation as follows:

[an electronic] generator controller [of the generator] comprising [that includes two separate output connections, one] a load dump output [through which a signal is sent to the load bank controller to cause the load bank to disconnect from the generator,] and [the other] a load enable output, said generator controller in electrical communication with said engine control module [through which a signal is sent to the load bank controller to connect the load bank to the generator, either entirely or in stages:]

Defendant's rewrite of Claim 1 should be rejected.

F. “a load bank controller comprising a load enable input, a load dump input, a load sensor” (1)

Plaintiff’s Proposed Construction	Defendant’s Proposed Construction
no construction necessary	An electronic controller of the load bank that has a load sensor and two separate input connections for receiving signals from the separate generator controller, one connection receives a signal that at least part of the load bank is to be connected to the generator and the other connection receives a signal that the entire load bank is to be disconnected from the generator all at once.

This is another attempt by Defendant to rewrite a limitation of Claim 1. Claim 1 states, in relevant part:

a load bank controller comprising a load enable input, a load dump input, a load sensor, and at least one load step output;

Defendant proposes to rewrite this limitation follows:

~~a load bank~~ **An electronic controller of the load bank comprising that has a load enable input, a load dump input, a load sensor, and at least one load step output and two separate input connections for receiving signals from the separate generator controller, one connection receives a signal that at least part of the load bank is to be connected to the generator and the other connection receives a signal that the entire load bank is to be disconnected from the generator all at once.**

Defendant’s rewrite of Claim 1 should be rejected.

Dated: August 3, 2023

Respectfully submitted,

/s/ James L. Etheridge

James L. Etheridge

Texas State Bar No. 24059147

Ryan S. Loveless

Texas State Bar No. 24036997

Travis L. Richins

Texas State Bar No. 24061296

ETHERIDGE LAW GROUP, PLLC

2600 E. Southlake Blvd., Suite 120 / 324

Southlake, Texas 76092

Telephone: (817) 470-7249

Facsimile: (817) 887-5950

Jim@EtheridgeLaw.com

Ryan@EtheridgeLaw.com

Travis@EtheridgeLaw.com

COUNSEL FOR MULTIQIP

CERTIFICATE OF SERVICE

I certify that a copy of this document was served on all counsel of record by ECF on
August 3, 2023.

/s/ James L. Etheridge

James L. Etheridge