

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

HALLIBURTON ENERGY SERVICES, INC.,
Petitioner,

v.

U.S. WELL SERVICES, LLC,
Patent Owner.

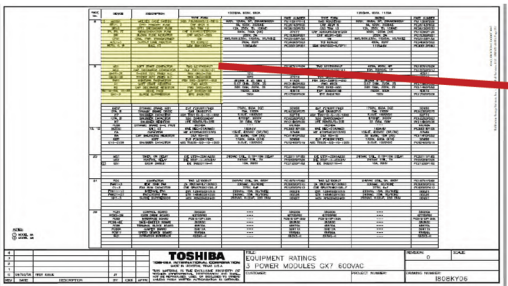
IPR2023-00558
U.S. Patent No. 11,136,870 B2

**PATENT OWNER'S OBJECTIONS TO
PETITIONER'S DEMONSTRATIVES**

Pursuant to the Board's Order Setting Oral Argument, *see* Paper 18 at 4–5 (PTAB Apr. 11, 2024), Patent Owner U.S. Well Services, LLC, respectfully submits the following objections to the demonstrative exhibit filed by Petitioner, Halliburton Energy Services, Inc., *see* Paper 23. The parties met and conferred on June 21, 2024, and were able to narrow the dispute, but they did not reach resolution as to the objections below. Every objection is based on the Board's "strict prohibition against the presentation of new evidence or arguments at the hearing," as stated in the Hearing Order, Paper 18 at 4.

I. Objections

<u>Slide #</u>	<u>Not Cited/Discussed in Briefs</u>	<u>Copy of Slide (Red Boxes Added)</u>
39	The passage in “Ex. 2003 (Durham Tr.) at 91:3–10” was never quoted, cited, or relied on by Petitioner’s Papers.	DEMONSTRATIVE EXHIBIT – NOT EVIDENCE IPR2023-00558; Petitioner’s Presentation, #39 Using Multiple Toshiba VFDs in Parallel with Coli’s Pump Is Not a New Argument PO deposes Petitioner’s expert about the substitution 3 Q So my question is, would the following statement be 4 true: A POSITA would have been motivated to simply 5 substitute the VFD of Coli described in paragraph 49 6 in part of the present system for the VFD described 7 in the Toshiba Manual without affecting the other 8 functionalities of Coli? 9 MS. FLANNERY: Object to form. 10 A Yes, that sentence would still be accurate. 2 A Well, my testimony was there's not a VFD described 3 in paragraph 49, but the statement as a whole is 4 still accurate. 5 Q Okay. And why is that? 6 A Well, it's because the Toshiba Manual VFDs for one 7 reason can be paralleled. You can run multiple 8 VFDs to control a single motor, and that would 9 increase the capability of the VFD system above the, 10 for example, 800 horsepower in Exhibit 1047. 11 Q And would a person of skill in the art in the 12 2010/2012 time period, would they have understood 13 how to arrange multiple VFDs from the Toshiba Manual 14 that way? 15 A Yes, it would. Ex. 2003 (Durham Tr.) at 91:3-10, 101:5-15; see also Pet. Reply (Paper 14) at 8-9

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62	The statement and citation “<i>See Hospira, Inc. v. Fresenius Kabi USA, LLC</i>, 946 F.3d 1322, 1329 (Fed. Cir. 2020) (‘Extrinsic evidence can be used to demonstrate what is “necessarily present” in a prior art embodiment even if the extrinsic evidence is not itself prior art.’)” was never cited, quoted, or relied on by Petitioner’s Papers.	DEMONSTRATIVE EXHIBIT – NOT EVIDENCE IPR2023-00558; Petitioner’s Presentation, #62 Toshiba Manual Discloses “Heat Sink Having Thermal Sensors” Schematics published with Toshiba Manual associate the thermistor with the heat sink <table><thead><tr><th>PAGE No.</th><th>DEVICE</th><th>DESCRIPTION</th><th>TYPE FORM</th></tr></thead><tbody><tr><td>0</td><td>MOUSE</td><td>MOLDED CASE SWITCH</td><td>500 PA-5000512-RE10</td></tr><tr><td>1</td><td>REF. 2</td><td>CPT PRIMARY FUSE</td><td>CRF ATOR 6</td></tr><tr><td>2</td><td>REF. 3</td><td>CPT SECONDARY FUSE</td><td>CRF TKN 17</td></tr><tr><td>3</td><td>PR. PS. PT</td><td>SEMICONDUCTOR FUSE</td><td>CRF 6.3/0.5/100V700</td></tr><tr><td>4</td><td>BFI</td><td>BLOWN FUSE INDICATOR</td><td>CRF MS211-265</td></tr><tr><td>5</td><td>CPT</td><td>CNTL. TRNS. TRANSFORMER</td><td>DT</td></tr><tr><td>6</td><td>AGLT-3</td><td>OUTPUT LINE REACTOR</td><td>TD K0801C</td></tr><tr><td>7</td><td>FACTS, V, W</td><td>WALL CT</td><td>LEN WAK1000-3</td></tr><tr><td>8</td><td></td><td></td><td></td></tr><tr><td>9</td><td></td><td></td><td></td></tr><tr><td>10</td><td>MS1</td><td>SOFT START CONTACTOR</td><td>TWN LCTF00407</td></tr><tr><td>11</td><td>MS2</td><td>CAP DISCHARGE CONTACTOR</td><td>CLK 7001-5155-21</td></tr><tr><td>12</td><td>CHT1-3F</td><td>F-STAT 3PC FIXED N.C.</td><td>TWN QM03-718</td></tr><tr><td>13</td><td>CHT1B-3B</td><td>F-STAT 3PC FIXED N.C.</td><td>TWN QM03-509</td></tr><tr><td>14</td><td>TH1</td><td>HEATING THERMISTOR</td><td>REN 990-118901-233</td></tr><tr><td>15</td><td>BT</td><td>SOFT START RESISTOR</td><td>IMP 8053</td></tr><tr><td>16</td><td>R2</td><td>CAP DISCHARGE RESISTOR</td><td>PRD 5007-503</td></tr><tr><td>17</td><td>HEAT-TRM. TACH-8</td><td>TEMP. TACH</td><td>ESP 10000000</td></tr><tr><td>18</td><td>SAT-3</td><td>SURGE SUPPRESSOR</td><td>EPC 840R250</td></tr></tbody></table> – <i>See Hospira, Inc. v. Fresenius Kabi USA, LLC</i>, 946 F.3d 1322, 1329 (Fed. Cir. 2020) (“Extrinsic evidence can be used to demonstrate what is ‘necessarily present’ in a prior art embodiment even if the extrinsic evidence is not itself prior art.”) Ex. 1007 pt. 2 at 251; see also Pet. Reply (Paper 14) at 14-16	PAGE No.	DEVICE	DESCRIPTION	TYPE FORM	0	MOUSE	MOLDED CASE SWITCH	500 PA-5000512-RE10	1	REF. 2	CPT PRIMARY FUSE	CRF ATOR 6	2	REF. 3	CPT SECONDARY FUSE	CRF TKN 17	3	PR. PS. PT	SEMICONDUCTOR FUSE	CRF 6.3/0.5/100V700	4	BFI	BLOWN FUSE INDICATOR	CRF MS211-265	5	CPT	CNTL. TRNS. TRANSFORMER	DT	6	AGLT-3	OUTPUT LINE REACTOR	TD K0801C	7	FACTS, V, W	WALL CT	LEN WAK1000-3	8				9				10	MS1	SOFT START CONTACTOR	TWN LCTF00407	11	MS2	CAP DISCHARGE CONTACTOR	CLK 7001-5155-21	12	CHT1-3F	F-STAT 3PC FIXED N.C.	TWN QM03-718	13	CHT1B-3B	F-STAT 3PC FIXED N.C.	TWN QM03-509	14	TH1	HEATING THERMISTOR	REN 990-118901-233	15	BT	SOFT START RESISTOR	IMP 8053	16	R2	CAP DISCHARGE RESISTOR	PRD 5007-503	17	HEAT-TRM. TACH-8	TEMP. TACH	ESP 10000000	18	SAT-3	SURGE SUPPRESSOR	EPC 840R250
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64	The passage in “Ex. 1002 (Durham Decl.) ¶ 116” was never quoted, cited, or relied on by Petitioner’s Papers.	DEMONSTRATIVE EXHIBIT – NOT EVIDENCE IPR2023-00558; Petitioner’s Presentation Toshiba Manual Discloses “Heat Sink Having Thermal Sensors” - Ex. 1007 is not new evidence - Cited in Petitioner’s expert declaration A POSITA would have reviewed the Toshiba website and product listings to learn about product offerings and VFD functionality. Ex. 1002, ¶¶ 113-114. The Toshiba website published schematics of the power electronics to accompany <i>Toshiba Manual</i>, and they confirm the presence of an IGBT output converter using the same configuration as in <i>Horikoshi</i>. Ex. 1007 (Internet Archive Declaration) p. 254. <i>Toshiba Manual</i> is directed toward the same ASD/VFD topology described in <i>Horikoshi</i>. Ex. 1002 (Durham Decl.) ¶ 116; see also Pet. (Paper 1) at 10

Dated: June 25, 2024

Respectfully submitted,

/Brian E. Ferguson/

Brian E. Ferguson (lead counsel)

Winston & Strawn LLP

Reg. No. 36,801

1901 L Street, N.W.

Washington, D.C. 20036

T: 202-282-5100

beferguson@winston.com

IPR-Profrac-USWell@winston.com

Lead Counsel for Patent Owner

CERTIFICATE OF SERVICE

Pursuant to 37 C.F.R. § 42.6(e), I certify that on this 25th day of June, 2024, Patent Owner's Objections to Petitioner's Demonstratives was served by email on the following counsel for Petitioner:

Elizabeth Durham Flannery (liz.flannery@bakerbotts.com)
Chad Walters (chad.walters@bakerbotts.com)

DLHalliburton870-871IPR@bakerbotts.com

Dated: June 25, 2024

Respectfully submitted,

/Brian E. Ferguson/
Brian E. Ferguson (lead counsel)
Winston & Strawn LLP
Reg. No. 36,801
1901 L Street, N.W.
Washington, D.C. 20036
T: 202-282-5100
beferguson@winston.com

IPR-Profrac-USWell@winston.com