

**IN THE UNITED STATES DISTRICT COURT
FOR THE WESTERN DISTRICT OF TEXAS
AUSTIN DIVISION**

NATIONAL OILWELL VARCO, L.P.

Plaintiff,

v.

OMRON OILFIELD & MARINE, INC.,

Defendant.

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CIVIL ACTION NO. 1:12-CV-00773-SS

**NATIONAL OILWELL VARCO, L.P.'S PROPOSED CLAIM CONSTRUCTION
FOR IDENTIFIED CLAIM TERMS AND PHRASES**

<u>Claim Terms</u>	<u>NOV's Proposed Claim Construction</u>
1. "drill string" (claims 1, 11 and 14)	Needs no construction. This term and/or phrase should be given its ordinary and customary meaning because it is readily understood by a person of ordinary skill in the art at the time of the invention. ¹
2. "drill bit" (claims 1 and 11) / "bit" (claim 14)	Needs no construction. This term and/or phrase should be given its ordinary and customary meaning because it is readily understood by a person of ordinary skill in the art at the time of the invention.
3. "drilling fluid"	Needs no construction. This term and/or phrase should be given its ordinary and customary meaning because it is readily understood by a person of ordinary skill in the

¹ There is a "heavy presumption" that a claim term carries its ordinary and customary meaning." *CCS Fitness, Inc. v. Brunswick Corp.*, 288 F.3d 1359, 1366 (Fed. Cir. 2002) (citation omitted). In such circumstance, a court often is not required to provide a new definition or rewrite a term. *Phillips v. AWH Corp.*, 415 F.3d 1303, 1314 (Fed. Cir. 2005)(en banc)("In some cases, the ordinary meaning of claim language as understood by a person of skill in the art may be readily apparent even to lay judges, and claim construction in such cases involves little more than the application of the widely accepted meaning of commonly understood words.")

<u>Claim Terms</u>	<u>NOV's Proposed Claim Construction</u>
(claims 1, 11 and 14)	art at the time of the invention.
4. “drilling fluid pressure” (claims 1, 11 and 14)	Needs no construction. This term and/or phrase should be given its ordinary and customary meaning because it is readily understood by a person of ordinary skill in the art at the time of the invention.
5. “drilling fluid pressure sensor” (claim 1)	Needs no construction. This term and/or phrase should be given its ordinary and customary meaning because it is readily understood by a person of ordinary skill in the art at the time of the invention.
6. “drilling fluid pressure regulator” (claim 1)	Needs no construction. This term and/or phrase should be given its ordinary and customary meaning because it is readily understood by a person of ordinary skill in the art at the time of the invention. Alternative construction: A drilling fluid (i.e., mud) pressure regulator, e.g., a device that is capable of detecting and responding to electrical, mechanical, hydraulic, or pneumatic signal(s).
7. “coupled to” (claim 1)	Connected to.
8. “changes in drilling fluid pressure” (claims 1, 11 and 14) / “changes in bit weight” (claim 14)	Needs no construction. This term and/or phrase should be given its ordinary and customary meaning because it is readily understood by a person of ordinary skill in the art at the time of the invention.
9. “a signal representing those changes” (claim 1) / “said signal representing the changes in drilling fluid pressure” (claim 11) / “said first signal representing the changes	Needs no construction. This term and/or phrase should be given its ordinary and customary meaning because it is readily understood by a person of ordinary skill in the art at the time of the invention.

<u>Claim Terms</u>	<u>NOV's Proposed Claim Construction</u>
in drilling fluid pressure” (claim 14) / “said second signal representing the changes in bit weight” (claim 14)	
10. “relay” (claim 1)	Needs no construction. This term and/or phrase should be given its ordinary and customary meaning because it is readily understood by a person of ordinary skill in the art at the time of the invention. Alternative construction: “To convey” or “transmitting,” i.e., pass on or passing through the chosen signal or signals.
11. “said relay responsive to the output signal of said drilling fluid pressure regulator to supply a drill string control signal at an output thereof” (claim 1)	Needs no construction. This term and/or phrase should be given its ordinary and customary meaning because it is readily understood by a person of ordinary skill in the art at the time of the invention. Alternative construction: A device that communicates, conveys, or imparts an electrical, mechanical, hydraulic, or pneumatic signal to, e.g., control the rig’s hoisting system.
12. “drill string control signal” (claim 1)	Needs no construction. This term and/or phrase should be given its ordinary and customary meaning because it is readily understood by a person of ordinary skill in the art at the time of the invention. Alternative construction: A signal used to control the rate of release of the drill string.
13. “drill string controller” (claims 1, 11 and 14)	Needs no construction. This term and/or phrase should be given its ordinary and customary meaning because it is readily understood by a person of ordinary skill in the art at the time of the invention. Alternative construction: A device that controls the rate of release of the drill string.
14. “rate of release of said drill string”	Rate of lowering the drill string.

<u>Claim Terms</u>	<u>NOV's Proposed Claim Construction</u>
(claims 1 and 11)	
<p>15. “a decrease in drilling fluid pressure results in said relay supplying a drill string control signal that operates said drill string controller to effect an increase in the rate of release of said string” /</p> <p>“an increase in drilling fluid pressure results in said relay supplying a drill string control signal that operates said drill string controller to effect a decrease in the rate of release of said drill string”</p> <p>(claim 1)</p>	<p>Needs no construction. This term and/or phrase should be given its ordinary and customary meaning because it is readily understood by a person of ordinary skill in the art at the time of the invention.</p> <p>Alternative construction of “results”: To proceed or arise as a consequence, effect, or conclusion.</p> <p>Alternative construction of “relay”: “To convey” or “transmitting,” i.e., pass on or passing through the chosen signal or signals.</p>
<p>16. “with direct effect at the drill bit associated with the drill string”</p> <p>(claims 1 and 11)</p>	<p>Needs no construction. This term and/or phrase should be given its ordinary and customary meaning because it is readily understood by a person of ordinary skill in the art at the time of the invention.</p>
<p>17. “producing a signal in response to changes in drilling fluid pressure”</p> <p>(claim 11) /</p> <p>“producing a first signal in response to changes in drilling fluid pressure”</p> <p>(claim 14) /</p> <p>“producing a second signal in response to changes in bit weight”</p> <p>(claim 14)</p>	<p>Needs no construction. This term and/or phrase should be given its ordinary and customary meaning because it is readily understood by a person of ordinary skill in the art at the time of the invention.</p> <p>Alternative construction: To create, generate, produce a signal in response to something said signal representing changes (in drilling fluid pressure or bit weight).</p>
<p>18. “relying [sic] said signal to a drill string controller”</p> <p>(claim 11) /</p> <p>“relaying said selected signal or signals to</p>	<p>Needs no construction. This term and/or phrase should be given its ordinary and customary meaning because it is readily understood by a person of ordinary skill in the art at the time of the invention.</p> <p>Alternative construction: To communicate, convey, or impart an electrical,</p>

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a drill string controller” (claim 14)	mechanical, hydraulic, or pneumatic signal to a drill string controller.
19. “controlling said drill string controller to increase the rate of release of said drill string when said signal represents a decrease in drilling fluid pressure” / “to decrease the rate of release of said drill string when said signal represents an increase in drilling fluid pressure” (claim 11)	Needs no construction. This term and/or phrase should be given its ordinary and customary meaning because it is readily understood by a person of ordinary skill in the art at the time of the invention. Alternative construction of “rate of release”: The rate (i.e., speed or change over time) of release (lowering).
20. “bit weight” (claim 14)	Needs no construction. This term and/or phrase should be given its ordinary and customary meaning because it is readily understood by a person of ordinary skill in the art at the time of the invention.
21. “selecting any one of said first signal, said second signal, and both said first and said second signals to control the release of said drill string” (claim 14)	Needs no construction. This term and/or phrase should be given its ordinary and customary meaning because it is readily understood by a person of ordinary skill in the art at the time of the invention.
22. “regulate the release said drill string” (claim 14)	To increase or decrease the rate of lowering of the drill string.
23. “regulates the release said drill string in response to said selected signal or signals” (claim 14)	To increase or decrease the rate of lowering of the drill string in response to said selected signal or signals.
24. “measuring changes” “changes” (claim 1, 11 and 14)	Measurement of changes over time which will also be compared to a set reference point.
25. “Selecting”	Needs no construction. This term and/or phrase should be given its ordinary and

<u>Claim Terms</u>	<u>NOV's Proposed Claim Construction</u>
(claim 14)	<p>customary meaning because it is readily understood by a person of ordinary skill in the art at the time of the invention.</p> <p>Alternative construction: Automatic selecting, <i>i.e.</i>, choosing.</p>