

**Appendix to Patent Owner’s Motion to Amend  
Original Disclosure Support for Claim Amendments under  
37 C.F.R. § 42.221(b)(1)**

<p align="center"><b><u>U.S. PATENT NO. 6,179,053</u></b> <b><u>CLAIM ELEMENTS</u></b></p>	<p align="center"><b><u>SUPPORT</u></b> <b><u>(1) ORIGINAL APPLICATION</u></b> <b><u>(2) ISSUED PATENT (SAME REFERENCE)</u></b></p>
<p>28. (Proposed Substitute Claim for Claim 1) An apparatus for securing a mandrel of a well tool in an operative position requiring fixed-point packoff above the casing of the well and within <u>a tubing head spool of a [in the] wellhead assembly, the apparatus comprising:</u></p>	<p>Abstract; p1:5-10; p5:21-6:2; p9:9-23; p10:6-23; p13:3-11; p14:14-15:3; p24:10-18; p15:1-8; Figs. 1-9; Claims 1 and 22</p> <p>Abstract; 1:7-11; 2:41-45; 3:48-62; 4:1-17; 4:64-5:5; 5:31-42; 8:35-42; 8:48-54; Figs. 1-9; Claims 1 and 22</p>
<p><u>a setting tool that is arranged to insert a bottom end of the mandrel through the wellhead, and is removable from the other portions of the apparatus;</u></p>	<p>p9:13-18; p14:1-11; p19:18-20:5; p20:18-21:2; p23:7-9; p23:16-19; p24:10-26:21; p28:22-29:16; Figs. 1, 6, 8-9</p> <p>3:53-58; 5:17-27; 7:6-15; 7:27-32; 8:10-12; 8:19-21; 8:35-9:26; 9:67-10:12; Figs. 1, 6, 8-9</p>
<p>a first and a second <u>mechanical lockdown mechanism that are separate from the setting tool and</u> arranged so that the mandrel is locked in the operative position only when both the first and the second <u>mechanical lockdown mechanisms</u> are in respective lockdown positions;</p>	<p>Abstract; p9:1-6; p10:6-23; p11:7-18; p12:3-13:11; p14:14-15:3; p19:18-21:5; p23:16-19; Figs. 1-9; Claims 1 and 22</p> <p>Abstract; 3:40-62; 4:1-17; 4:24-34; 4:43-5:5; 5:31-42; 7:6-32; 8:19-21; Figs. 1-9; Claims 1 and 22</p>
<p>the first <u>mechanical</u> lockdown mechanism adapted to detachably maintain the mandrel in proximity to the fixed-point packoff when in the lockdown position; [and]</p>	<p>p9:1-6; p9:9-23; p10:6-23; p14:14-15:3; p20:9-15; Figs. 1-9; Claims 1 and 22</p> <p>3:40-45; 3:48-62; 4:1-17; 5:31-42; 7:19-24; Figs. 1-9; Claims 1 and 22</p>

<p>the first <u>mechanical</u> lockdown mechanism including a base member for connection to a wellhead of the well and a locking member for detachably engaging the base member;</p>	<p>p9:1-6; p9:9-23; p10:6-23; p14:14-15:11; p20:9-15; Figs. 1-9; Claims 1 and 22  3:40-45; 3:48-62; 4:1-17; 5:31-50; 7:19-24; Figs. 1-9; Claims 1 and 22</p>
<p>the second <u>mechanical</u> lockdown mechanism having a range of adjustment adequate to ensure that the mandrel can be moved into the operative position, and <u>then</u> locked down in the operative position <u>without the use of hydraulic pressure</u> while the first <u>mechanical</u> lockdown mechanism is in the lockdown position; <u>and</u></p>	<p>p9:1-6; p9:9-23; p11:7-18; p13:3-7; p16:1-5; p16:22-18:3; p20:15-21:2; Figs. 1-9; Claims 1 and 22  3:40-45; 3:48-62; 4:24-34; 4:64-67; 5:61-65; 6:14-38; 7:24-32; Figs. 1-9; Claims 1 and 22</p>
<p><u>the mandrel including a packoff assembly that seals against the fixed-point packoff within the tubing head spool.</u></p>	<p>p14:14-15:3; p20:13-21:2; p24:10-27:5; Figs. 8-9  5:31-42; 7:22-32; 8:35-9:26; Figs. 8-9</p>
<p>29. (Proposed Substitute Claim for Claim 22) A method for lockdown of a mandrel of a well tool in an operative position in which the mandrel is packed off against a <u>fixed-point above the casing of the well and within a tubing head spool of a [in the] wellhead assembly, the method</u> comprising steps of:</p>	<p>Abstract; p1:5-10; p5:21-6:2; p9:9-23; p10:6-23; p13:3-11; p14:14-15:3; p24:10-18; p15:1-8; Figs. 1-9; Claims 1 and 22  Abstract; 1:7-11; 2:41-45; 3:48-62; 4:1-17; 4:64-5:5; 5:31-42; 8:35-42; 8:48-54; Figs. 1-9; Claims 1 and 22</p>

<p>a) mounting above a wellhead of the well an apparatus for securing the mandrel of the well tool in the operative position, comprising:</p> <p><u>i) a setting tool that is arranged to insert a bottom end of the mandrel through the wellhead, and is removable from the other portions of the apparatus; and</u></p>	<p>p9:13-18; p14:1-11; p19:18-20:5; p20:18-21:2; p23:7-9; p23:16-19; p24:10-26:21; p28:22-29:16; Figs. 1, 6, 8-9</p> <p>3:53-58; 5:17-27; 7:6-15; 7:27-32; 8:10-12; 8:19-21; 8:35-9:26; 9:67-10:12; Figs. 1, 6, 8-9</p>
<p><u>ii) a first and a second mechanical lockdown mechanism that are separate from the setting tool and arranged so that the mandrel is locked in the operative position only when both the first and second mechanical lockdown mechanisms are in respective lockdown positions;</u></p>	<p>Abstract; p9:1-6; p10:6-23; p11:7-18; p12:3-13:11; p14:14-15:3; p19:18-21:5; p23:16-19; Figs. 1-9; Claims 1 and 22</p> <p>Abstract; 3:40-62; 4:1-17; 4:24-34; 4:43-5:5; 5:31-42; 7:6-32; 8:19-21; Figs. 1-9; Claims 1 and 22</p>
<p><u>iii) the first mechanical lockdown mechanism being adapted to detachably maintain the mandrel in proximity to the fixed-point for packoff, and including a base member for connection to a top of a wellhead of the well and a locking member for detachably engaging the base member; [and]</u></p>	<p>p9:1-6; p9:9-23; p10:6-23; p14:14-15:11; p20:9-15; Figs. 1-9; Claims 1 and 22</p> <p>3:40-45; 3:48-62; 4:1-17; 5:31-50; 7:19-24; Figs. 1-9; Claims 1 and 22</p>

<p>iv) <u>the second mechanical lockdown mechanism having a range of adjustment to ensure that the mandrel can be moved into the operative position, and then locked down in the operative position without the use of hydraulic pressure while the first mechanical lockdown mechanism is in the lockdown position; and</u></p>	<p>p9:1-6; p9:9-23; p11:7-18; p13:3-7; p16:1-5; p16:22-18:3; p20:15-21:2; Figs. 1-9; Claims 1 and 22</p> <p>3:40-45; 3:48-62;4:24-34; 4:64-67; 5:61-65; 6:14-38; 7:24-32; Figs. 1-9; Claims 1 and 22</p>
<p>v) <u>the mandrel including a packoff assembly that seals against the fixed-point packoff within the tubing head spool;</u></p>	<p>p14:14-15:3; p20:13-21:2; p24:10-27:5; Figs. 8-9</p> <p>5:31-42; 7:22-32; 8:35-9:26; Figs. 8-9</p>
<p>b) after inserting the mandrel through the wellhead into proximity to the fixed-point in the well, engaging the locking member of the first lockdown mechanism with the base member so that the mandrel is only moveable within the range of adjustment;</p>	<p>p9:1-6; p9:9-23; p10:6-23; p11:7-18; p13:3-7; p16:1-5; p17:13-18:3; p21:3-13; Figs. 1-9; Claims 1 and 22</p> <p>3:40-45; 3:48-62; 4:1-17; 4:24-34; 4:64-67; 5:61-65; 6:26-38; 7:33-42; Figs. 1-9; Claims 1 and 22</p>
<p>c) moving the mandrel into the operative position if the mandrel is not yet packed off against the fixed-point; [and]</p>	<p>Abstract; p9:9-23; p10:6-23; p13:3-7; p13:7-11; p14:14-15:3; p24:10-27:5; Figs. 1-9; Claims 1 and 22</p> <p>Abstract; 3:48-62; 4:1-17; 4:64-67; 5:1-5; 5:31-42; 8:35-9:26; Figs. 1-9; Claims 1 and 22</p>
<p>d) locking the second lockdown mechanism in the lockdown position; <u>and</u></p>	<p>p9:1-6; p9:9-23; p11:7-18; p13:3-7; Figs. 1-9; Claims 1 and 22</p> <p>3:40-45; 3:48-62;4:24-34; 4:64-67; Figs. 1-9; Claims 1 and 22</p>

<p><u>e) removing the setting tool from the well tool.</u></p>	<p>p9:13-18; p14:1-11; p19:18-20:5; p20:18-21:2; p23:7-9; p23:16-19; p24:10-26:21; p28:22-29:16; Figs. 1, 6, 8-9</p> <p>3:53-58; 5:17-27; 7:6-15; 7:27-32; 8:10- 12; 8:19-21; 8:35-9:26; 9:67-10:12; Figs. 1, 6, 8-9</p>
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