

1) Family number: 30424745 (US2004012198A)

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Title: COMPOSITE COILED TUBING END CONNECTOR

Priority: US19950005377P 19950928 GB19980006845 19960926 US19960721135 19960926
 WO1996US15427 19960926 US19990368333 19990803 US19990410605 19991001
 US19990157614P 19991004 CA20002385724 20000929 CA20002666070 20000929
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 WO2000US41073 20001004 US20030442680 20030521 WO2004US16093 20040521
 US20090356278 20090120 CA20112666070 20111213 CA20142759974 20140812

Family:	Publication number	Publication date	Application number	Application date
	AT301796 E	20050815	AT20000967179T	20000929
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	AU200077419 A5	20010510	AU20000077419D	20000929
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Probable Assignee: FIBERSPAR CORP**Assignee(s):(std):** FIBER SPAR AND TUBE CORP ; FIBERSPAR CORP ; FIBERSPAR CORP N D GES D STAAT ; FIBERSPAR SPOOLABLE PROD INC ; FOWLER STEWART H ; BROTZELL ARTHUR D ; THO CHANTHOL**Assignee(s):** WEATHERFORD ARTIFICIAL LIFT SYSTEMS INC ; SAS JAWORSKY ALEXANDER ; BROTZELL ARTHUR D1329 7A STREET N.W.CALGARYA1T2M 3J7CA ; CITIZENS BANK OF MASSACHUSETTS ; CONOCO INC ; FIBERSPAR LINEPIPE LLC ; FIBERSPAR SPOOLABLE PRODUCTS INC ; FIBERSPAR CORP N D GES D STAATES DELAWARE WEST W ; RBS CITIZENS NATIONAL ASSOCIATION ADMINISTRATIVE A ; SAS JAWORSKY ALEX ; SAS JAWORSKY ALEX ; FIBERSPAR CORP N D GES D STAATES DELAWARE WEST WAREHAM ; FOWLER STEWART H JR ; RBS CITIZENS NATIONAL ASSOCIATION ADMINISTRATIVE AGENT AS ; FIBERSPAR CORP502-800 PURCHASE ST.NEW BEDFORDMA02740-6355US ; FIBERSPAR CORP502-800 PURCHASE STREETNEW BEDFORDMA02740US**Inventor(s):(std):** THO CHANTOL ; THO CHANTHOL ; SAS JAWORSKY ALEXANDER ; SAS JAWORSKY ALEX ; FOWLER STEWART H JR ; FOWLER STEWART H ; FOWLER JR STEWARD H ; BROTZELL ARTHUR D ; BROTZELI ARTHUR D ; THO CHANTAL ; FOWLER JR STEWART H ; FOWLER H ; SAS JAWORSKY ALEX**Inventor(s):** STEWART H FOWLER ; THO CHANTHOLUS ; SAS JAWORSKY ALEXUS ; ALEXANDER SAS JAWORSKY ; ALEX SAS JAWORSKY ; ARTHUR D BROTZELL ; BROTZELL ARTHUR D1329 7A STREET N.W.CALGARYA1T2M 3J7CA ; CHANTHOL THO ; FOWLER STEWART HUS

Agent(s): RICHES MCKENZIE AND HERBERT LLP; GOODWIN PROCTER LLP,PATENT ADMINISTRATOR; GOODWIN PROCTER LLP PATENT ADMINISTRATOR; GOODWIN PROCTER LLP

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GW HR HU ID IE IL IN IS IT JP KE KG KP KR KZ LC LI LK LR LS LT LU LV MA MC MD MG MK ML MN MR MW MX MZ NA NE NI NL NO NZ OM PG PH PL PT RO RU SC SD SE SG SI SK SL SN SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW

International class (IPC 8-9): E21B17/02 E21B17/04 E21B17/20 F16L19/08 F16L21/00 F16L25/01 F16L33/20 F16L33/22 F16L47/04 F16L49/02 F16L49/06 H02G15/24 (Advanced/Invention); E21B17/00 E21B17/02 F16L19/00 F16L21/00 F16L33/20 F16L47/00 (Core/Invention)

International class (IPC 1-7): E21B17/04 E21B17/20 F16L F16L19/08 F16L33/00 F16L33/18 F16L47/04 H02G15/24

CPC: F16L19/083 F16L47/04 E21B17/04 E21B17/20 F16L33/223 E21B17/02 F16L19/086 F16L33/22

European class: E21B17/02 E21B17/04 E21B17/20 F16L19/08C F16L19/08C2 F16L33/22 F16L47/04

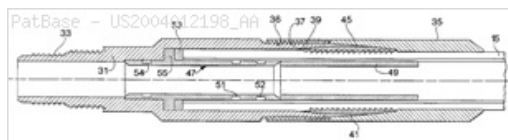
US class: 174/21.00R 174/21R 281/222.1 281/259 285/222.1 285/249 285/249P 285/259

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Cited documents: WO9919653 A1, WO9712115 A2, WO9502782 A1, WO9319927, WO9307073 A1, WO9221908, WO9113925, WO8704768, WO0031458 A1, USRE35081 E, USRE34780 E, USRE29112 E, US87993 A, US7498509 BB, US749633 A, US7285333 BB, US7243716 BB, US7234410 BB, US7152632 BB, US7080667 BB, US7029356 BB, US6983766 BB, US6978804 BB, US6902205 BB, US6857452 BB, US6807989 BB, US6764365 BB, US6706348 BB, US6663453 BB, US6634388 BA, US6634387 BA, US6631743 BB, US6604550 BB, US6532994 BA, US6470915 BA, US646887 A, US6461079 BA, US6422269 BA, US6402430 BA, US6390140 BB, US6372861 BA, US6361299 BA, US6357966 BA, US6357485 BB, US6334466 BA, US6328075 BA, US6315002 BA, US6286558 BA, US6220079 BA, US6209587 BA, US6148866 A, US6136216 A, US6093752 A, US6066377 A, US6032699 A, US6016845 A, US6004639 A, US5988702 A, US5984581 A, US5951812 A, US5950651 A, US5933945 A, US5921285 A, US5913337 A, US5908049 A, US5875792 A, US5828003 A, US5804268 A, US5798155 A, US5797702 A, US5795102 A, US5758990 A, US5755266 A, US5730188 A, US5683204 A, US5671811 A, US5641956 A, US5622211 A, US5558375 A, US5551484 A, US5538513 A, US5525698 A, US5524937 A, US5521937 A, US5499661 A, US5472764 A, US5469916 A, US5452923 A, US5443099 A, US5437311 A, US5435867 A, US5428706 A, US5426297 A, US5416724 A, US5398729 A, US5395913 A, US5394488 A, US5364130 A, US5351752 A, US5348096 A, US5348088 A, US5346658 A, US5334801 A, US5332269 A, US5330807 A, US5285204 A, US5285008 A, US5265648 A, US5261462 A, US5222769 A, US5209136 A, US5188872 A, US5184682 A, US5182779 A, US5176180 A, US5172765 A, US5170011 A, US5156206 A, US5097870 A, US5090741 A, US5077107 A, US5048572 A, US4995761 A, US4992787 A, US4972880 A, US4942903 A, US4941774 A, US4936618 A, US4913657 A, US4903735 A, US4859024 A, US4849668 A, US4844516 A, US4842024 A, US482181 A, US4789007 A, US4758455 A, US4741795 A, US4728224 A, US4712813 A, US4700751 A, US4681169 A, US4657795 A, US4627472 A, US4606378 A, US4578675 A, US4567916 A, US4556340 A, US4530379 A, US4522235 A, US4522058 A, US4515737 A, US4507019 A, US4488577 A, US4463779 A, US4447378 A, US4446892 A, US4445734 A, US4422801 A, US4402346 A, US4380252 A, US4351364 A, US4336415 A, US4308999 A, US4306591 A, US4303457 A, US4303263 A, US4273160 A, US4261390 A, US4248062 A, US4241763 A, US4226446 A, US4220381 A, US4200126 A, US4190088 A, US418906 A, US4139025 A, US4137949 A, US4133972 A, US4125423 A, US4114393 A, US4111469 A, US4108701 A, US4095865 A, US4057610 A, US4053343 A, US4048807 A, US4032177 A, US3980325 A, US3974862 A, US396176 A, US3960629 A, US3957410 A, US3956051 A, US3933180 A, US3913624 A, US3907335 A, US3901281 A, US3860742 A, US3860040 A, US3856052 A, US3828112 A, US3817288 A, US3814138 A, US3783060 A, US3776805 A, US3773090 A, US3769127 A, US3744016 A, US3740285 A, US3738637 A, US3734421 A, US3730229 A, US3728187 A, US3701489 A, US3700519 A, US3696332 A, US3692601 A, US3685860 A, US3677978 A, US3606402 A, US3606396 A, US3604461 A, US3589752 A, US3589135 A, US3579402 A, US3554284 A, US3522413 A, US3507412 A, US3477474 A, US3390704 A, US3379220 A, US3334663 A, US3306637 A, US3277231 A, US3170137 A, US3116760 A, US3086369 A, US2991093 A, US2973975 A, US2810424 A, US2750569 A, US2725713 A, US2690769 A, US2648720 A, US2624366 A, US2481001 A, US2467520 A, US2464416 A, US2009278348 AA, US2009107558 AA, US2008210329 AA, US2008185042 AA, US2008014812 AA, US2008006338 AA, US2008006337 AA, US2007154269 AA, US2007125439 AA, US2005189029 AA, US2004096614 AA, US2002185188 AA, US2002119271 AA, US2001006712 AA, US1930285 A, US1890290 A, US1793455 A, US1234812 A, JP2163592 A2, JP163592, GB956500 A, GB909187 A, GB809097 A, GB553110, GB2365096, GB2270099 A1, GB2255994 A1, GB2193006 A1, GB2103744 A1, GB1297250 A, FR989204 A, EP0981992 A1, EP0970980, EP0953724 A2, EP0854029 A2, EP0681085 A2, EP0536844 A1, EP0505815 A2, EP0503737 A1, EP0427306 A2, EP0352148, EP0203887 A2, EP0024512, DE4214383 C1, DE4040400 A1, DE3603597, DE1959738, CH461199 A, CH461199, BE559688 A,

Forward Citations: WO16120624, WO14033072, WO14033072, WO14026190, WO14023943, WO11061681, WO11061681, WO09156723, WO09156723, WO09142863, WO09002590, WO05056973, WO04020775, WO04020775, WO03067018, WO03067018, WO0173331, WO0173331, WO0125667, US9945651, US9890880, US9695652, US9611958, US9206676, US9127546, US9091387, US8992243, US8985154, US8973263, US8955599, US8952887, US8839822, US8763647, US8746289, US8713895, US8708726, US8678042, US8678041, US8671992, US8588619, US8414724, US8365502, US8360478, US8261967, US8231569, US8209855, US8187687, US8110741, US8066033, US8056620, US7963098, US7922099, US7916124, US7853193, US7831933, US7721611, US7671597, US7610969, US7597142, US7562909, US7498509, US7172038, US7059881, US6923273, US6923262, US6902205, US6893054, US6890007, US6863137, US6840337, US6772840, US6766853, US6761574, US6746055, US6561278, US6538198, US6481498, US6454014, US6435447, US6422148, US6352216, US6349767, US6296066, US6264244, US6257332, US2017241576, US2014311754, US2013255986, US2013187015, US2013180707, US2013062048, US2011215567, US2011210542, US2011203725, US2011044697, US2010301598, US2010230090, US2010218944, US2010212769, US2010148492, US2010101676, US2009278348, US2009107558, US2008308048, US2008290660, US2008185843, US2008185042, US2008131630, US2008129041, US2008011483, US2008006338, US2008006337, US2006278387, US2006157974, US2006078866, US2006077184, US2006066591, US2005116469, US2005115741, US2005067037, US2004229195, US2004194950, US2004174016, US2004099412, US2004084191, US2004040707, US2004012198, US2003230893, US10087979, ES2255843, EP2880350, EP2162592, EP1659325, EP1659325, EP1236860, EP1236860, EP0953724, EP0953724, EP0911483, EP0911483, EA8791, EA008791, CN106639905, CN103390816, CN103362455, CN103213669, CN103213669,

Abstract: Connectors for attaching a composite pipe to a service member are described herein. In one embodiment, a connector can include a service end, a slip nut, a slip, a seal carrier, and an energy conductor. The slip nut can be disposed about the outer surface of the pipe and can be engaged by the service end. The slip can be positioned about the outer surface of the pipe and can be engaged by the service end and the slip nut to compress the slip into gripping contact with the pipe. The seal carrier can be positioned in a bore of the pipe at a location radially opposite the slip to resist deformation of the pipe when the slip is compressed into gripping contact with the pipe. The energy conductor can be embedded within and surrounded by a material of the service end for connection with an energy conductor within the composite pipe.



2) Family number: 29581684 (US2005173919A)

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Title: COUPLING ASSEMBLY AND METHOD
Priority: US20020377742P 20020503 US20030513213 20030505 WO2003US14065 20030505
 US20050513213 20050422

Family:	Publication number	Publication date	Application number	Application date
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Probable Assignee: DLT ACQUISITION INC
Assignee(s):(std): POSSON MICHAEL D ; ROBROY IND INC ; ROBROY INDUSTRIES INC
Assignee(s): ROBROY IND ; DLT ACQUISITION INC
Inventor(s):(std): MICHAEL D POSSON ; POSSON MICHAEL D
Inventor(s): POSSON MICHAEL
Agent(s): WEBB LAW FIRM PC; THE WEBB LAW FIRM; WEBB LAW FIRM
Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE ES FI FR GA GB GD GE GH GM GN GQ GR GW HR HU ID IE IL IN IS IT JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MC MD MG MK ML MN MR MW MX MZ NE NI NL NO NZ OM PH PL PT RO RU SC SD SE SG SI SK SL SN SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW

International class (IPC 8-9): F16L15/08 F16L25/00 F16L35/00 F16L58/18 F16L9/14 F16L9/147 (Advanced/Invention); F16L15/00 F16L25/00 F16L35/00 F16L58/00 F16L9/00 (Core/Invention)

International class (IPC 1-7): F15L15/04 F16L25/00 F16L35/00 F16L9/14

CPC: Y10T29/49881 F16L15/08 F16L58/182 F16L58/185

European class: F16L15/08 F16L58/18B F16L58/18D

US class: 285/333 285/55 29/456

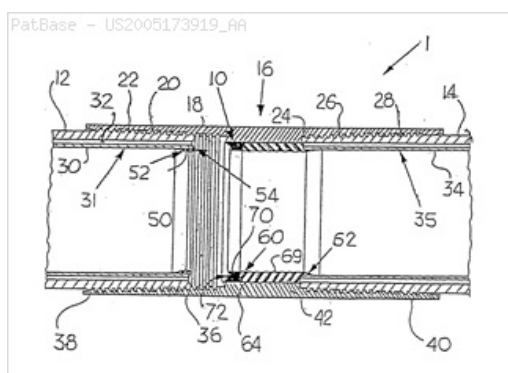
[Classification Explorer](#)

Cited documents: US6312024 BA, US6036235 A, US570166 A, US5282652 A, US5069485 A, US4509776 A, US4366971 A, US3479059 A, US3472533 A, US3298716 A, US3253841 A, US1909075 A, JP617975, JP6017975 A2,

Forward Citations: WO12103018, WO09085051, US9915383, US9388648, US9255452, US8857860, US8740259, US8678447, US7909368, US7857355, US7731246, US7722085, US2014103638, US2012193908, US2012119484, US2011031738, US2011025050, US2010194108, US2010194103, US2009295146, US2009167016, US2009008929, US2008079261, US2008073905, US2007284872, JP2013221555, GB2433566, GB2433566, EP2283266, EP2283266,

Abstract:

The liner assembly (10) is for use in a joint between two pipe segments. The assembly (10) includes a first ring member (50), a second ring member (60) and a corrosion barrier ring (70). The first ring member (50) is configured to cooperate with a first liner (30) inserted in a first pipe segment (12). The second ring member (60) is configured to cooperate with a second liner (34) inserted in a second pipe segment (14) to be joined to the first pipe segment (12). The corrosion barrier ring (70) is disposed between and cooperates with the first ring member (50) and second ring member (60). The corrosion barrier ring (70) includes opposing indented ends (72) cooperating with the second ends (54, 64) of the first and second ring members (50, 60). The second ends (54, 64) of the first and second ring members (50, 60) define corresponding registering shapes to cooperate with the opposing indented ends (72) of the corrosion barrier ring (70).



Title:

COUPLING FOR CONNECTING TUBULAR ELEMENTS FOR BOTTOM-HOLE ASSEMBLIES

Priority:

BR2011PI02442 20110506 EP20110290352 20110801 WO2012EP58141 20120503
EP20120718662 20120503

Family:

Publication number	Publication date	Application number	Application date
AR086280 AA	20131204	AR2012P101584	20120504
AR108123 AB	20180718	AR2017P100930	20170411
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WO12152657 A1	20121115	WO2012EP58141	20120503

Probable Assignee:

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Assignee(s):(std):

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Assignee(s):

V AND M DO BRASIL SA ; VALLOUREC MANNESMANN OIL AND GAS FRANCE

Inventor(s):(std):

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Inventor(s):

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Agent(s):

GRIFFITH HACK; GOUDREAU GAGE DUBUC; LAVERY DE BILLY LLP; Marsolais Richard; DE KERNIER GABRIEL; MARSOLAIS RICHARD; SULEIMAN I AL AMMAR LAW OFFICE; OBLON MCCLELLAND MAIER AND NEUSTADT LLP

Designated states:

AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PE PG PH PL PT QA RO RS RU RW SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class (IPC 8-9):

E21B17/00 E21B17/02 F02M21/04 F16L15/00 F16L15/04 F16L15/08 F16L35/00 F17D5/00 G01V15/00 G06K19/04 (Advanced/Invention); E21B17/02 F16L15/00 (Core/Invention)

International class (IPC 1-7):

E21B17/02 F16L15/00 F16L15/08

CPC:

F16L15/08 E21B17/02 F16L15/002 F16L15/004 F16L2201/60

US class:

285/390

Classification Explorer

Cited documents:

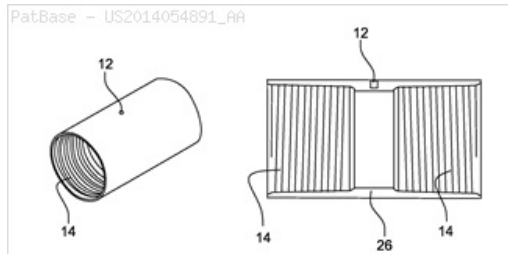
WO9408278 A1, WO11073657 A2, WO06041306 A1, WO06041306 A1, WO06036863 A1, WO05010073 A1, WO05010073 A1, US7474221 BB, US7159654 BB, US7159654, US6989764 BB, US6811187 BB, US6454315 BA, US6333699 BA, US6206436 BA, US6206436, US6202436 BA, US5713423 A, US4202490 A, US4202490 A, US2118350 A, US2010171593 AA, US2008165011 AA, US2006175404 AA, US2005230109 AA, US2005230109, US2004217880 AA, US2004217880, US2002158120 AA, US2002158120 AA, US2002035448 AA, US2002035448 AA, US2002014966 AA, US2002014966 AA, US1889868 A, US1849066 A, JPWO0006937 A1, JP8502571 T2, JP8502571, JP57184196 U1, JP57184196 U, JP5296368 A2, JP5296368, JP10089554 A2, JP10089554, JP006937 A1, GB2401187 A1, GB2401187 A1, EP1020674 A1, EP1020674 A1, CN201715129 U,

Forward Citations:

WO16193492, WO13033196, WO13033196, US9714730, US10227829, KR101816367, EP3204590, EP2826948, EP2751371, CN107109909, CN105888566, CN104976478, CN104384866,

Abstract:

A coupling including a tubular body with two ends of the body each including a portion of internal threading for joining to a tubular element, and a central portion separating the two ends each including a portion of threading and having a wall thickness greater than the wall thickness of the ends of the body. The coupling includes an extension segment that extends from one of the ends of the tubular body, after the portion of internal threading, the extension segment having same outside diameter as that of the tubular body and an inside diameter greater than or equal to that of the portion of internal threading. Moreover, the extension segment includes a housing, including an opening onto an external surface of the coupling, in which an electronically responsive identification tag is housed.



4) Family number: 30236773 (US5713423A)

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Title: DRILL PIPE
Priority: US19920918049 19920724 CA19932097366 19930531 US19930171410 19931222
 WO1994US14511 19941216 US19950442584 19950517 US19970834153 19970414

Family:	Publication number	Publication date	Application number	Application date
	AT177508 E	19990315	AT19940905971T	19941216
	AU199340126 A1	19940127	AU19930040126	19930608
	AU199514380 A1	19950710	AU19950014380	19941216
	AU684595 B2	19971218	AU19950014380	19941216
	CA2097366 AA	19940125	CA19932097366	19930531
	CA2156398 AA	19950817	CA19942156398	19941216
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	EP0580271 A2	19940126	EP19930250150	19930603
	EP0580271 A3	19940504	EP19930250150	19930603
	EP0683845 A1	19951129	EP19950905971	19941216
	EP0683845 B1	19990310	EP19950905971	19941216
	MX9304442 A1	19940228	MX19930004442	19930722
	SG49288 A1	19980518	SG19960008824	19941216
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	WO9517575 A1	19950629	WO1994US14511	19941216

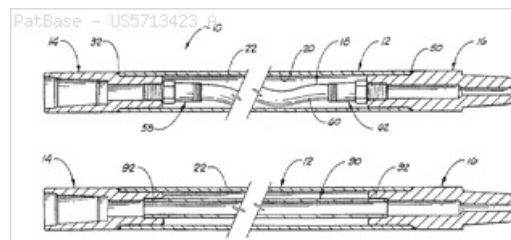
Probable Assignee: CHARLES MACHINE WORKS
Assignee(s):(std): CHARLES MACHINE WORKS ; THE CHARLES MACHINE WORKS INC
Assignee(s): THE CHARLES MACHINE WORKS INC PERRY OKLA US ; ADIR ET COMP ; CHARLES MACHINE WORKS INC ; CHARLES MACHINE WORKS INC THE ; MARTIN J SCOTT ; STEPHENSON BRENT G
Inventor(s):(std): BRENT G STEPHENSON ; J SCOTT MARTIN ; JSCOTT MARTIN ; MARTIN J ; MARTIN J SCOTT ; SCOTT MARTIN J ; STEPHENSON BRENT ; STEPHENSON BRENT G
Inventor(s): STEPHENSON BRENT G OKLAHOMA CITY OK 73122 US ; MARTIN J SCOTT PERRY OK 73077 US
Agent(s): FB RICE; FB RICE PTY LTD; KNIGHTSBRIDGE PATENT ATTORNEYS; KIRBY EADES GALE BAKER
Designated states: AT AU BE CA CH DE DK ES FR GB GR IE IT LU MC NL PT SE
International class (IPC 8-9): E21B17/00 E21B17/042 F16L39/00 F16L7/00 F16L9/18 (Advanced/Invention); E21B17/042 (Advanced/Non-invention); E21B17/00 F16L39/00 F16L7/00 F16L9/18 (Core/Invention); E21B17/02 (Core/Non-invention)
International class (IPC 1-7): B62D17/18 E21B17/00 E21B17/02 E21B17/042 E21B7/20 E21B7/26 F16L7/00
CPC: F16L39/00 F16L7/00 F16L9/18 E21B17/00
European class: E21B17/00 F16L39/00 F16L7/00 F16L9/18 P21B17/042
US class: 166/242.3 175/215 175/320 175/62

[Classification Explorer](#)

Cited documents: WO9517575 A1, WO8604950 A1, US5174395 A, US5101918 A, US5007487 A, US5005613 A, US4949797 A, US4934466 A, US4921057 A, US4880067 A, US4872519 A, US4850440 A, US4691790 A, US4462472 A, US4385668 A, US4337563 A, US4299510 A, US4274549 A, US4248261 A, US4094536 A, US4067596 A, US4012061 A, US3998479 A, US3974862 A, US3926265 A, US3873156 A, US3831635 A, US3830319 A, US3799440 A, US3791415 A, US3786878 A, US3664441 A, US3578029 A, US3471177 A, US3446297 A, US3061024 A, US3047313 A, US2958512 A, US2778603 A, US2402003 A, US2258001 A, US1831209 A, US1746132 A, EP0580271 A2, EP0532324 A1, DE3239342 A1, DE2654150 A1,

Forward Citations: WO17095322, WO17020893, WO15050741, WO14172720, WO14172720, WO14070459, WO08033504, USRE38418, USD834975, US9982529, US9810353, US9739400, US9689514, US9562392, US9415496, US9404342, US9328558, US9303795, US9255376, US9127794, US9091124, US9085942, US8915315, US8313600, US8287005, US7735560, US7699108, US7458617, US7152700, US7134514, US7134514, US6827159, US6814168, US6810973, US6810972, US6810971, US6808210, US6000482, US2015096804, US2015096369, US2014054891, US2013147186, US2012199400, US2012067650, US2012067649, US2009102702, US2009078423, US2008135296, US2008110631, US2008061621, US2006066102, US2006016621, US2005103527, US10107049, NO20120155, GB2566779, EP2989283, EP2584137, EP0903532, EP0900912, EP0900912, EP0683845, EP0683845, DE102010047568, CN104089086, AU2014256816, AU2012268811,

Abstract:
 A drill pipe (10, 100, 220, 200, 210, 250) is disclosed which includes a cylindrical pipe section (12), a box end (14), a pin end (16) and a hydraulic hose assembly (202, 18) or tube (212, 90, 260) inserted between the box and pin ends and extending within the cylindrical pipe section. All, or the majority of drilling fluid passes through the hydraulic hose assembly (202, 18) or tube (212, 90, 260). The interior surface of the cylindrical pipe section (12) may or may not be exposed to the drilling fluid but any corrosion generated by metal-to-fluid contact is generally trapped between the hose or tube and the pipe section. The reduced volume of the hydraulic hose assembly (202, 18) or tube (212, 90, 260) relative to conveying the drilling fluid through the interior of the cylindrical pipe section reduces significantly the waste of drilling fluid, allows the fluid to be pressurized more rapidly to initiate drilling operation, and limits fluid spill damage to the environment.



5) Family number: 54589517 (US2015027581A)

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Title: PIPE, PIPE CONNECTION AND PIPELINE SYSTEM

Priority: US20120600392P 20120217 US20120733162P 20121204 US20120733169P 20121204
US20130379245 20130214 WO2013CA50114 20130214 US20140379245 20140815
US20170819377 20171121

Family:	Publication number	Publication date	Application number	Application date
	AU2013220901 AA	20140918	AU20130220901	20130214
	AU2013220901 BB	20170504	AU20130220901	20130214
	CA2864762 AA	20140815	CA20132864762	20130214
	EP2815164 A1	20141224	EP20130748927	20130214
	EP2815164 A4	20151104	EP20130748927	20130214
	US2015027581 AA	20150129	US20130379245	20130214
	US2018119851 AA	20180503	US20170819377	20171121
	US9857003 BB	20180102	US20130379245	20130214
	WO13120201 A1	20130822	WO2013CA50114	20130214

Probable Assignee: CORE LINEPIPE INC

Assignee(s):(std): 8193053 CANADA LTD ; CORE LINEPIPE INC

Assignee(s): CORE LINEPIPE INC210 - 308 -11 AVENUE SECALGARYA1T2G 0Y2CA ; 1626830 ALBERTA LTD ; 8193053 CANADA LTD210 - 308 -11 AVENUE SECALGARYA1T2G 0Y2CA ; BOUEY SAMUEL GLEN ; SHEEHAN DAVE ; MCLEOD DAVID

Inventor(s):(std): BOUEY SAMUEL GLEN ; MCLEOD DAVID ; SHEEHAN DAVE

Inventor(s): SHEEHAN DAVECA ; MCLEOD DAVIDCA ; BOUEY SAMUEL GLENCA

Agent(s): MCCARTHY PORT PATENT AND TRADE MARK ATTORNEYS; ELLIPTIC LEGAL AND PATENT SERVICES; BENNETT JONES LLP; PERKINS SARAH; WILMER CUTLER PICKERING HALE AND DORR LLP; CALDWELL ROSEANN B ET AL

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class (IPC 8-9): B29C65/00 B29C65/34 B29C65/56 B29C65/72 F16L13/16 F16L19/08 F16L33/22 F16L39/00 F16L47/03 F16L58/10 F16L58/18 F16L9/00 F16L9/147 F16L9/22 H05B3/06 (Advanced/Invention)

CPC: F16L13/16 F16L19/08 F16L33/22 F16L58/1009 H05B3/06 F16L9/147 B29K2023/065 B29K2077/00 B29C65/342 B29C65/3464 B29C65/561 B29C65/568 B29C65/72 B29C66/1122 B29C66/1222 B29C66/1224 B29C66/12821 B29C66/1284 B29C66/30321 B29C66/5221 B29C66/52292 B29C66/52295 B29C66/52297 B29C66/52298 B29C66/636 B29C66/71 B29C66/72321 F16L47/03 F16L58/18 F16L58/181 Y10T29/49879 B29C65/3468 B29C66/73161 F16L13/141 F16L13/146

US class: 138/141 219/534 285/21.2 29/455.1

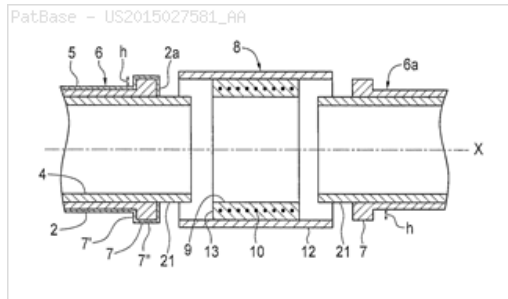
[Classification Explorer](#)

Cited documents: WO9107272 A1, WO9104845 A1, WO19007272, WO11053141 A1, WO05022022 A1, WO03086756 A1, WO0192775 A1, USRE32230 E, USRE29112 E, US8042252 BB, US7946629 BB, US7781040 BB, US7600537 BB, US7293590 BB, US7238400 BB, US7166177 BB, US7093620 BB, US7063118 BB, US6979025 BB, US6902205 BB, US6893604 BB, US6889716 BB, US6844040 BB, US6807988 BB, US6804942 BB, US6773773 BB, US6716503 BA, US6670005 BB, US6656318 BA, US6478338 BA, US6428054 BA, US6406063 BA, US6164702 A, US6112771 A, US6109306 A, US6039084 A, US595437 A, US5944359 A, US5831149 A, US5778908 A, US5709418 A, US5634672 A, US5629062 A, US5445848 A, US5445191 A, US5425981 A, US5407436 A, US5364130 A, US5316046 A, US5268050 A, US5261462 A, US5181752 A, US5127116 A, US5125690 A, US5114191 A, US5108135 A, US5052444 A, US5024252 A, US4915417 A, US4898212 A, US4860798 A, US4850395 A, US4818318 A, US4770442 A, US4718698 A, US4676276 A, US4627146 A, US4601496 A, US4530521 A, US4515737 A, US4514244 A, US4504086 A, US4482174 A, US4437616 A, US4431034 A, US4384595 A, US4347090 A, US4343333 A, US4299082 A, US4273160 A, US4248062 A, US4173670 A, US4120083 A, US4081302 A, US4061367 A, US4023835 A, US3948292 A, US3905398 A, US3604461 A, US3536104 A, US3481369 A, US3466738 A, US3268240 A, US3117597 A, US2815043 A, US2810424 A, US2010295299 AA, US2010291342 AA, US2010266789 AA, US2010218839 AA, US2009097910 AA, US2009011210 AA, US2008047657 AA, US2008006337 AA, US2007277895 AA, US2007062595 AA, US2007028983 AA, US2006016552 AA, US2005287326 AA, US2005183785 AA, US2004089405 AA, US2003209312 AA, US2003127147 AA, US2003026928 AA, US2002150752 AA, US2002054968 AA, JP2003207077 A2, GB2347892 A1, GB2319576 A1, GB1444560 A, GB1263060 A, GB1199447 A, EP1388703 A1, EP0972980 A2, EP0969236 A2, EP0750973 A2, EP0396273 A2, EP0385731 A1, CN2268175 Y, CA2753024 AA, CA2513506 AA,

Forward Citations: WO18097802, WO17098327, WO15192237, WO15128792, US9915383, US9625078, US9285066, US2015184788, US2014103638, US2010178860, GB2545183, CN105805434,

Abstract:

A pipeline system is enclosed including unlined or plastic lined pipes. A mechanical metal to metal connection is employed that can provide a fluid tight seal. A pipe coupling may be employed to span the connection. Plastic lined pipes can have their plastic liners connected to form a fluid tight bladder. Electro-fusion may be employed.



6) Family number: 30568638 (US2004090068A)

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Title: METHOD AND APPARATUS FOR SEALING RADIALLY EXPANDED JOINTS
Priority: US20020290003 20021107 US20040840996 20040507 EP20050744644 20050503
WO2005US15146 20050503 US20050264850 20051102

Family:	Publication number	Publication date	Application number	Application date
	AR048734 AA	20060517	AR2005P101847	20050506
	CA2565021 AA	20061101	CA20052565021	20050503
	DE602005043238 D1	20140522	DE200560043238T	20050503
	EP1745233 A1	20070124	EP20050744644	20050503
	EP1745233 A4	20110316	EP20050744644	20050503
	EP1745233 B1	20140409	EP20050744644	20050503
	US2004090068 AA	20040513	US20020290003	20021107
	US2005012278 AA	20050120	US20040840996	20040507
	US2006061099 AA	20060323	US20050264850	20051102
	US7086669 BB	20060808	US20020290003	20021107
	WO05114029 A1	20051201	WO2005US15146	20050503

Probable Assignee: VAM USA LLC

Assignee(s):(std): COSTA D S ; COSTA D SCOTT ; DELANGE RICHARD W ; EVANS M E ; EVANS M EDWARD ; GRANT PRIDECO L P ; GRANT PRIDECO LP ; VAM USA LLC

Assignee(s): VAM USA LLC HOUSTON ; V AND M TCA LP ; V AND M ATLAS BRADFORD LP ; V AND M ATLAS BRADFORD LLC

Inventor(s):(std): COSTA D S ; COSTA D SCOTT ; DELANGE RICHARD W ; EVANS M E ; EVANS M EDWARD

Inventor(s): COSTA D ; DELANGE RICHARD W KINGWOOD ; EVANS M ; DELANGE RICHARD

Agent(s): FINLAYSON AND SINGLEHURST; MUELLER SCHUPFNER AND PARTNER PATENT U RECHTSANWALTSPARTNERSCHAFT MB; MUELLER SCHUPFNER AND PARTNER; BROWNING BUSHMAN PC; CARLOS A TORRES BROWNING BUSHMAN PC; C JAMES

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GW HR HU ID IE IL IN IS IT JP KE KG KM KP KR KZ LC LI LK LR LS LT LU LV MA MC MD MG MK ML MN MR MW MX MZ NA NE NI NL NO NZ OM PG PH PL PT RO RU SC SD SE SG SI SK SL SM SN SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW

International class (IPC 8-9): E21B17/042 E21B43/10 F16J15/08 F16L13/14 F16L13/16 F16L15/00 F16L15/04 F16L25/00 (Advanced/Invention); E21B17/02 E21B43/02 F16L13/14 F16L25/00 (Core/Invention)

International class (IPC 1-7): F16L15/04 F16L17/00 F16L25/00

CPC: E21B17/042 E21B43/103 E21B43/106 F16J15/0887 F16L13/168 F16L15/003

European class: E21B17/042 E21B43/10F E21B43/10F2 F16J15/08E F16L13/14 F16L13/16H F16L15/00B4

US class: 277/602 277/602P 285/333 285/334 285/382 285/382.2 285/39 285/390

[Classification Explorer](#)

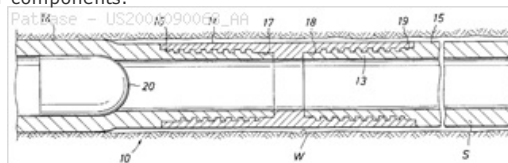
Cited documents: WO9918328 A1, WO0104520 A1, US7124821 BB, US7107663 BB, US7086669 BB, US7040018 BB, US7017950 BB, US6997264 BB, US6976539 BB, US6971685 BB, US6968618 BB, US6942029 BB, US6863313 BA, US6722443 BA, US6712401 BB, US6712401 BA, US6695012 BA, US6619696 BB, US6619696 BA, US6607220 BB, US6607220 BA, US6604763 BA, US6581980 BA, US6554287 BA, US6415863 BA, US6409175 BA, US6345431 BA, US6305723 BA, US6120067 A, US6098717 A, US5944107 A, US5924745 A, US5921441 A, US5829797 A, US5810401 A, US5794985 A, US5787933 A, US5687995 A, US5664327 A, US5516157 A, US5383692 A, US5375893 A, US5348095 A, US5306052 A, US5156043 A, US5129685 A, US5101906 A, US5029906 A, US4969671 A, US4949791 A, US4893848 A, US4893844 A, US4861077 A, US4827748 A, US4822081 A, US4805430 A, US4791796 A, US4728129 A, US4705307 A, US4696498 A, US4690436 A, US4671544 A, US4662663 A, US4662659 A, US4648627 A, US4607865 A, US4601498 A, US4595219 A, US4591195 A, US4590995 A, US4580788 A, US4577895 A, US4530527 A, US4501058 A, US4496175 A, US4494601 A, US4487434 A, US4450618 A, US4426105 A, US4388752 A, US4325571 A, US4324407 A, US4294559 A, US4253687 A, US4234197 A, US418752 A, US4099745 A, US4069573 A, US4053247 A, US4026583 A, US4011918 A, US4009893 A, US3888496 A, US3850461 A, US3813751 A, US3674292 A, US3508771 A, US3479059 A, US3476409 A, US3307860 A, US320738 A, US3114566 A, US3104121 A, US2907589 A, US2616729 A, US2380690 A, US2270519 A, US2181343 A, US2179202 A, US2087185 A, US2004194278 AA, US2003038476 AA, US1918443 A, US1168196 A, JPS57186664, JPS57186664 A2, GB2345308 A1, GB1458893 A, EP1403573 A1, EP0961007 A2, EP0672817 A1, EP0373843 A2, EP0192015 A1, DE3703052 C1,

Forward Citations: WO19023535, WO17075682, WO15094268, WO15014557, WO08097226, US9970242, US9926749, US9810352, US9803256, US9677346, US9657555, US9657365, US9644248, US9599259, US9567837, US9383045, US9234612, US9222607, US9046004, US9004544, US8840152, US8205680, US8177262, US8151461, US8029211, US7918284, US7740076, US7665532, US7661473, US7607333, US7594544, US7585002, US7419193, US7380839, US2017314371, US2016160575, US2015285009, US2014008081, US2013224005, US2013200616, US2012037377, US2011233926, US2011233925, US2011203741, US2011133449, US2011133448, US2010230958, US2010181761, US2010181727, US2010132956, US2010052319, US2009304455, US2009302604, US2009205839, US2009102133, US2009001721, US2008296894, US2008226425, US2008136181, US2008100064, US2008066930, US2008066929,

US2007257486, US2007228729, US2007132237, US2007035132, US2007035131, US2007035127, US2007024053, US2006162937, US2006162145, US2006071473, US2006061099, US2006053053, US2006006648, US2005236834, US2005127672, US2005015963, US2005001429, US10156128, US10047570, US10006256, RU2659946, JP4762313, JP2009503402, GB2551827, EP3027948, EP1907747, EP1907747, CN107002470, CN105829640, CN103362457, CN103291388, CN103266859, CN103266859,

Abstract:

Connectors and connections that enhance mechanical and sealing engagement between the ends of tubular bodies that are radially expanded by a forging tool. The connectors are designed to maintain or restore mechanical and sealing engagement following expansion. The connections are made by joining components that exhibit different spring back characteristics following mechanical deformation. Dissimilar material may be used for the connectors or the connected components can be made of the same materials but dimensioned and configured to exert an interfering force between engaged components following expansion. In operation, a material or component with a high spring back characteristic is positioned adjacent a material or component having a lower spring back characteristic. Following passage of a forging tool, the expanded components spring back differently toward their original unexpanded dimensions to produce the enhanced seal or mechanical engagement. The materials of the end connectors are selected and positioned such that a compressive or locking force is exerted between the different component of the connectors due to the difference in the spring back of the materials or components.



7) Family number: 3480265 (US5048871A)

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Title: SCREWED PIPE JOINT

Priority: DE19883825993 19880728 DE19895001875 19890725 EP19890730173 19890725

Family:	Publication number	Publication date	Application number	Application date
	AT78571 E	19920815	AT19890730173T	19890725
	CN1013455 B	19910807	CN19891006128	19890727
	CN1039889 A	19900221	CN19891006128	19890727
	DE3825993 C1	19891221	DE19883825993	19880728
	DE58901875 D1	19920827	DE19895001875	19890725
	EP0353182 A2	19900131	EP19890730173	19890725
	EP0353182 A3	19910102	EP19890730173	19890725
	EP0353182 B1	19920722	EP19890730173	19890725
	JP2138589 A2	19900528	JP19890193808	19890726
	NO892929 A	19900129	NO19890002929	19890717
	NO892929 A0	19890717	NO19890002929	19890717
	US5048871 A	19910917	US19890386299	19890727

Probable Assignee: MANNESMANN 4000 DUESSELDORF DE AG

Assignee(s):(std): MANNESMANN AG

Assignee(s): MANNESMANN AG 4000 DUESSELDORF DE ; MANNESMANN AKTIENGESSELLSCHAFT ; MANNESMANN 4000 DUESSELDORF DE AG

Inventor(s):(std): QUADFLIEG ERICH ; SIEKMEYER JOSEF ; PFEIFFER GERD ; LENZE FRIEDRICH ; KRUG GERHARD ; YOOZEFU JIIKUMAIYAA ; SIEKMEYER JOSEF DIPL ING ; GERUTO PUFUAIFUAA ; GERUHARUTO KURUUKU ; GERD PFEIFFER ; FURIIDORIHI RENTSUE ; EERIHI KUATOFURIKU ; SIEKMEYER JOSEF DR ING ; AL GERD PFEIFFER ET ; QUADFLIEG ERICH DR ING ; PFEIFFER GERD DR ING ; LENZE FRIEDRICH DR ING ; KRUG GERHARD DR ING

Inventor(s): KRUG DR ING GERHARD W 4100 DUISBURG 25 DE ; LENZE DR ING FRIEDRICH W 4030 RATINGEN 4 DE ; PFEIFFER DR ING GERD W 4330 MUELHEIM DE ; QUADFLIEG DR ING ERICH W 4150 KREFELD DE ; ERICH QUADFLIEG ; FRIEDRICH LENZE ; SIEKMEYER DR ING JOSEF ; GERD PFEIFFER ET AL

Designated states: AT DE ES FR GB GR IT NL

International class
(IPC 8-9): E21B17/043 F16L15/00 F16L15/04 F16L15/06 (Advanced/Invention);
E21B17/02 F16L15/00 (Core/Invention)

International class
(IPC 1-7): E21B17/08 F16L15/00 F16L15/04 F16L35/00

CPC: Y10S285/913 F16L15/001 E21B17/043 F16L15/00 Y10T403/32598

European class: E21B17/043 F16L15/00 F16L15/00B

US class: 285/148.19 285/175 285/330 285/333 285/369 285/39 285/913 403/118

[Classification Explorer](#)

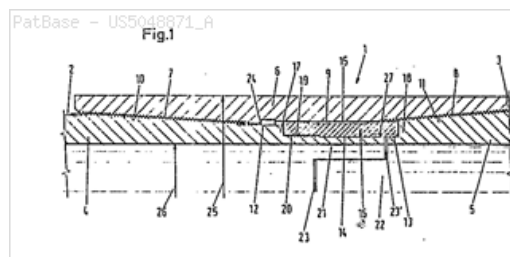
Cited documents: US4706997 A, US4679831 A, US4398754 A, US4397484 A, US4366971 A, US4341482 A, US4341481 A, US3307860 A, US2465027 A, US2380690 A, US2267716 A, US2040766 A, US1781091 A, US1474905 A, FR1502148 A, EP0060549 A1, DE392878 A,

Forward Citations: WO04053377, US9845645, US9616559, US9133968, US9109726, US8739861, US8439406, US8136216, US8091930, US8029026, US7918284, US7914052, US7895726, US7887103, US7886831, US7819185, US7798534, US7740076, US7739917, US7712522, US7665532, US7621323, US7603758, US7578043, US7571774, US7559365, US7556092, US7516790, US7513313, US7503393, US7438133, US7434618, US7424918, US7419009, US7404438, US7398832, US7390032, US7383889, US7377326, US7363984, US7363691, US7363690, US7360591, US7357190, US7357188, US7350564, US7350563, US7308755, US7240928, US7240728, US7226090, US7169239, US7107663, US7100946, US7025135, US7017950, US6981547, US6817633, US6726391, US6231086, US5997045, US5794985, US2016369655, US2012312550, US2011180273, US2011127768, US2010237612, US2010032166, US2010005643, US2009091130, US2008289814, US2008007060, US2007007760, US2006162937, US2005285397, US2005184521, US2005023831, US2004245768, US2004244968, US2004231839, US2004228679, US2004194278, US2004135370, US2004113428, US2004108119, US2004104575, US2004017081, US10082042, US10066446, US10060197, US10006255, DE4231084, CN104563905, CN102116135, CN102116135,

Abstract:

A screwed pipe joint with a bell for connecting two pipes of a drill pipe string. The screwed pipe joint includes, in opposed relation,

a first pipe having a first tapered threaded end (10) and a second pipe having a second tapered threaded end (11), the first tapered pipe end and the second tapered pipe end having a different taper and pitch, and being shaped so that when the pipes are joined they are form-locked and having an axial clearance (23, 23') therebetween; and a bell having a first and second threaded section (7, 8) complementary to and for engagement with the first and second threaded pipe ends, and an unthreaded section (9) therebetween and a radially inward projecting shoulder (24) on the unthreaded section (9) of the bell (6) opposite the first pipe (2); the first and second pipe ends having respective annular recesses (14, 13) therein defining, with the unthreaded bell section (9), an annular space (15) therebetween; a sealing sleeve within the annular space (15) having an outside diameter smaller than the inside diameter of the unthreaded section (9) of the bell (6) and being axially fixed in the recess (14) of the first pipe end.



8) Family number: 42777308 (US2009008929A)

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Title: PIPE COUPLING SPACER INSERT

Priority: US20070825317 20070705

WO2008GB50539 20080704

US20100906299 20101018

Family:

Publication number	Publication date	Application number	Application date
CA2691104 AA	20090108	CA20082691104	20080704
CA2691104 C	20121127	CA20082691104	20080704
GB200921607 A0	20100127	GB20090021607	20080704
GB2462052 A1	20100127	GB20090021607	20080704
GB2462052 B2	20111228	GB20090021607	20080704
US2009008929 AA	20090108	US20070825317	20070705
US2011031738 AA	20110210	US20100906299	20101018
WO09004387 A2	20090108	WO2008GB50539	20080704
WO09004387 A3	20090226	WO2008GB50539	20080704

Probable Assignee: NATIONAL OILWELL VARCO LP

Assignee(s):(std): LUCAS BRIAN RONALD ; NAT OILWELL VARCO L P ; NAT OILWELL VARCO LP ; PERSON DAVID VERNON

Assignee(s): NATIONAL OILWELL VARCO L P ; NATIONAL OILWELL VARCO LP

Inventor(s):(std): PERSON DAVID VERNON

Inventor(s): DAVID VERNON PERSON

Agent(s): MCFADDEN FINCHAM; OSLER HOSKIN AND HARCOURT LLP; GUY MCCLUNG; NATIONAL OILWELL VARCO; LUCAS PHILLIP BRIAN

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class F16L21/00 F16L21/02 F16L25/12 F16L35/00 F16L55/00 (Advanced/Invention);
(IPC 8-9): F16L21/02 F16L25/00 F16L55/00 (Core/Invention)

CPC: F16L21/002 F16L25/12

European class: F16L21/00B F16L25/12

US class: 285/31 285/31P 285/336 285/36 285/36S 285/45

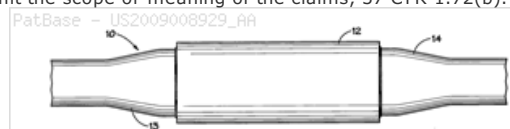
[Classification Explorer](#)

Cited documents: USRE23199 E, US7596847 BB, US7225523 BB, US7114751 BB, US7107662 BA, US6863313 BA, US6811189 BA, US6312024 BA, US6050610 A, US6036235 A, US590811 A, US5779276 A, US570166 A, US5505464 A, US5470111 A, US5406983 A, US5282652 A, US5236230 A, US5224738 A, US5069485 A, US5029906 A, US4915427 A, US4856828 A, US4786090 A, US4703959 A, US4679831 A, US4671544 A, US4550936 A, US4509776 A, US4496173 A, US4309050 A, US4269437 A, US3989280 A, US3736007 A, US3712645 A, US3482007 A, US3253841 A, US2805872 A, US2487241 A, US2382489 A, US2354900 A, US2316140 A, US2233734 A, US2086151 A, US2040766 A, US2005173919 AA, US2005151369 AA, US2002130515 AA, US1986357 A, US1909075 A, DE914085 A, DE1016077 B,

Forward Citations: WO18144266, WO14132116, US9388648, US8678447, US7731246, US2010194108, US2010194103, US2009055730, US2008079261, US10113680, ITVI20130050, EP2962031, EA028543,

Abstract:

A tubular coupling system, a protective spacer for use within a coupling, and methods of their use; the spacer, in at least some embodiments, having two (or more) separate and separable members that are length-adjustable to accommodate different distances between ends of two tubulars connected with a coupling. This abstract is provided to comply with the rules requiring an abstract which will allow a searcher or other reader to quickly ascertain the subject matter of the technical disclosure and is submitted with the understanding that it will not be used to interpret or limit the scope or meaning of the claims, 37 CFR 1.72(b).



Title: WELL TUBING LINER SYSTEM

Priority: US19880160271 19880225 CA19890592035 19890224 WO1989US00691 19890224
US19910643287 19910122 US19920892605 19920529

Family:

Publication number	Publication date	Application number	Application date
AU198933482 A1	19890922	AU19890033482	19890224
CA1334297 A1	19950207	CA19890592035	19890224
US5320388 A	19940614	US19920892605	19920529
WO8908214 A1	19890908	WO1989US00691	19890224

Probable Assignee: NULINER INC

Assignee(s):(std): MILLER PIPELINE SERVICE CORP

Assignee(s): NULINER INC ; NEITZEL NORMAN ; EBERSOLE LYNN ; LACY PHILIP B ; MILLER DON W ; MILLER PIPELINE EQUIPMENT CO ; MILLER PIPELINE EQUIPMENT CO LLC

Inventor(s):(std): EBERSOL LYNN ; EBERSOLE LYNN ; LACY PHILIP B ; NEITZEL NORMAN

Inventor(s): NORMAN NEITZEL ; PHILIP B LACY ; LYNN EBERSOL

Agent(s): RIDOUT AND MAYBEE LLP

Designated states: AT AU BE BR CH DE DK FR GB IT JP LU NL NO SE SU

International class (IPC 8-9): E21B17/00 E21B17/042 F16L15/00 F16L57/06 F16L58/18 (Advanced/Invention); E21B17/042 (Advanced/Non-invention); E21B17/00 E21B17/02 F16L57/00 F16L58/00 (Core/Invention); E21B17/02 (Core/Non-invention)

International class (IPC 1-7): F16L15/00 F16L23/00 F16L39/00 F16L55/128 F16L58/10

CPC: E21B17/00 E21B17/042 F16L57/06 F16L58/182

European class: E21B17/00 E21B17/042 F16L57/06 F16L58/18B P21B17/042

US class: 285/353 285/355 285/390 285/55

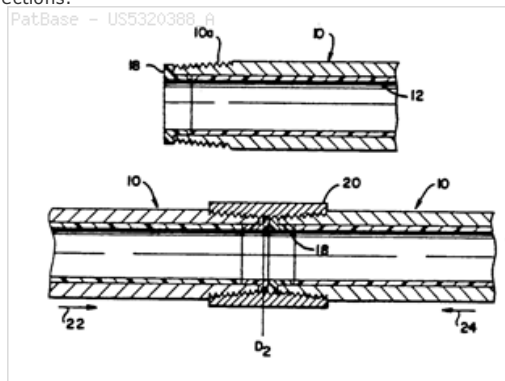
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Cited documents: US5028081 A, US4997613 A, US4923663 A, US4883292 A, US4856828 A, US4852655 A, US4773479 A, US4709946 A, US4588215 A, US4568113 A, US4556240 A, US4507842 A, US4496499 A, US4377894 A, US4296954 A, US4025751 A, US3968552 A, US3939243 A, US3687487 A, US3620555 A, US3606659 A, US3596931 A, US3593391 A, US3479059 A, US3461918 A, US3459619 A, US3427050 A, US3382121 A, US3372462 A, US3298716 A, US3284108 A, US3266821 A, US3192612 A, US3050786 A, US3030253 A, US3020068 A, US2805872 A, US2761702 A, US2724672 A, US2664373 A, US2077035 A, US122131 A, JP59091022 A2, GB2176865 A1, GB2084686 A1, DE1022860 B, CA1241262 A1,

Forward Citations: WO14186024, WO08091511, WO08091511, US9435173, US9255452, US8857860, US7909368, US7857355, US7350565, US7114751, US7108063, US7108063, US7107662, US6863313, US6596121, US6042153, US5997219, US5988691, US5906400, US5906399, US5779276, US5584512, US5566986, US5114634, US2015376981, US2013292936, US2012248766, US2012119484, US2009295146, US2009167016, US2008174110, US2007181296, US2006254041, US2005217747, US2004102069, US2004036287, US2003173774, US2002076273, GB2528813, GB2528813, GB2453438, EP2820338,

Abstract:

A well tube liner system includes rigid, self supporting plastic liners inserted within well tube sections and including end flanges adjacent opposed ends of the tube sections for sealing against each other and against a connecting collar when the tube sections are drawn axially together during assembly of the tube sections. An auxiliary spacer corresponding in general configuration to the flanges is provided for insertion between the flanges of liner sections to maintain the flanges in axially spaced apart and sealed condition to compensate for worn threads while retaining the same liner sections.



Title: METHOD AND APPARATUS FOR SEALING RADIALY EXPANDED JOINTS

Priority: EP20040750398 20040421 WO2004US12241 20040421

Family:

Publication number	Publication date	Application number	Application date
AT532600 E	20111115	AT20040750398T	20040421
CA2563736 AA	20061018	CA20042563736	20040421
CA2563736 C	20121127	CA20042563736	20040421
DE602004035241 D1	20120105	DE200460035241T	20040421
EP1755821 A1	20070228	EP20040750398	20040421
EP1755821 A4	20080917	EP20040750398	20040421
EP1755821 B1	20111109	EP20040750398	20040421
WO05113190 A1	20051201	WO2004US12241	20040421

Probable Assignee: VAM USA LLC

Assignee(s):(std): COSTA D SCOTT ; DELANGE RICHARD W ; EVANS M EDWARD ; GRANT PRIDECO L P ; GRANT

PRIDECO LP ; VAM USA LLC

Assignee(s): V AND M ATLAS BRADFORD LP ; V AND M ATLAS BRADFORD LLC ; VAM USA LLC HOUSTON ; EVANS M ; COSTA D

Inventor(s):(std): EVANS M EDWARD ; EVANS M ; DELANGE RICHARD W ; DELANGE RICHARD ; COSTA D SCOTT ; COSTA D

Inventor(s): COSTA D SCOTT KINGWOOD ; DELANGE RICHARD W KINGWOOD ; EVANS M EDWARD SPRING

Agent(s): FINLAYSON AND SINGLEHURST; MUELLER SCHUPFNER AND PARTNER PATENT U RECHTSANWALTSPARTNERSCHAFT MBB; SCHUPFNER GEORG

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GW HR HU ID IE IL IN IS IT JP KE KG KP KR KZ LC LI LK LR LS LT LU LV MA MC MD MG MK ML MN MR MW MX MZ NA NE NI NL NO NZ OM PG PH PL PT RO RU SC SD SE SG SI SK SL SN SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW

International class (IPC 8-9): B23P11/00 E21B43/10 F16L13/00 F16L15/04 (Advanced/Invention)

International class (IPC 1-7): B23P11/00

CPC: E21B43/106 F16L13/004 F16L15/003

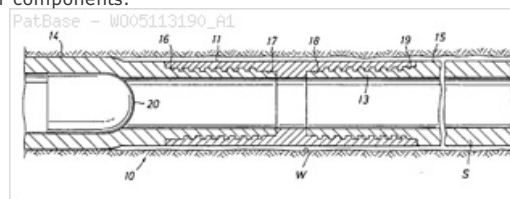
European class: E21B43/10F2 F16L13/00C F16L15/00B4

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Cited documents: WO04003416 A1, US6345431 BA, US4893848 A, US4053247 A, US3674292 A, US2005087983 AA, US2004069498 AA, US2004007364 AA,

Forward Citations: WO14151886, WO14151886, WO12167045, WO12167045, US9976395, US9657555, US8657040, US7895726, US7887103, GB2528594, GB2528594, GB2435062, AU2012388782,

Abstract:
Connectors and connections that enhance mechanical and sealing engagement between the ends of tubular bodies that are radially expanded by a forging tool. The connectors are designed to maintain or restore mechanical and sealing engagement following expansion. The connections are made by joining components that exhibit different spring back characteristics following mechanical deformation. Dissimilar material may be used for the connectors or the connected components can be made of the same materials but dimensioned and configured to exert an interfering force between engaged components following expansion. In operation, a material or component with a high spring back characteristic is positioned adjacent a material or component having a lower spring back characteristic. Following passage of a forging tool, the expanded components spring back differently toward their original unexpanded dimensions to produce the enhanced seal or mechanical engagement. The materials of the end connectors are selected and positioned such that a compressive or locking force is exerted between the different component of the connectors due to the difference in the spring back of the materials or components.



11) Family number: 935287 (US3550485A)

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Title: POWER PIPE TONGS WITH VARIABLE BRAKE

Priority: US19690825196 19690516

Family:

Publication number	Publication date	Application number	Application date
US3550485 A	19701229	US19690825196	19690516

Probable Assignee: BYRON JACKSON INC

Assignee(s):(std): BYRON JACKSON INC

Assignee(s): HUGHES TOOL CO

Inventor(s):(std): DICKMANN JOHN L ; NICOLSON GARTH F

Inventor(s): GARTH F NICOLSON ; JOHN L DICKMANN

International class (IPC 8-9): E21B19/16 (Advanced/Invention); E21B19/00 (Core/Invention)

International class (IPC 1-7): B25B17/00 E21B19/16

CPC: E21B19/16

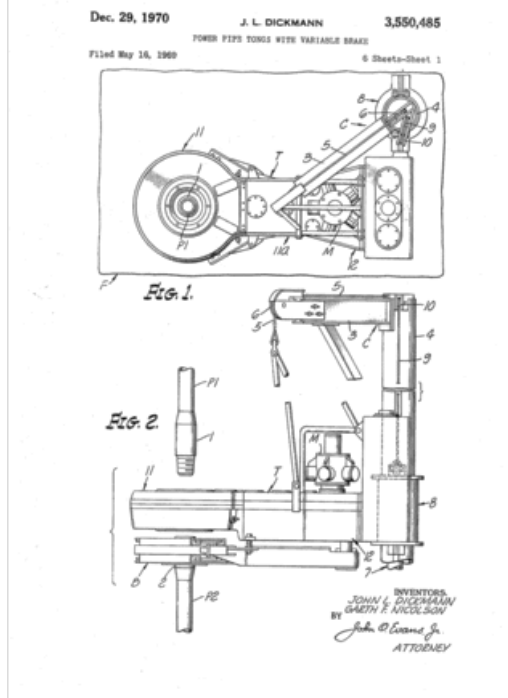
European class: E21B19/16

US class: 81/57.15 81/57.18 81/571.5

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Forward Citations: US6212976, US5758553, US5740703, US5520072, US5036927, US4867236, US4518365, US4484897, US4404876, US4266450, US4089240, US3793913, US3706243, US3704638, US2009121507, US2005188793,

Abstract:
ABSTRACT OF THE DISCLOSURE
Power pipe tongs in which pipe gripping jaws are actuated into pipe gripping positions from retracted positions by cams and cam followers on an outer driven ring and on the jaws, the jaws being carried by an inner ring, rotation of the outer ring relative to the inner ring effecting camming of the jaws to the pipe gripping positions, and in which a brake band is anchored on the tong housing and is engaged with the inner ring, a fluid pressure expansible conduit engaging the brake band to effect frictional engagement of the latter with the inner ring through-out substantially the entire extent of the brake band, the braking force being a function of the pressure applied to the expansible conduit. B

**12) Family number: 1029678** (US3703111A)

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Title: PIPE TONGS
Priority: US19710104865 19710108 US19720225163 19720210
Family:

Publication number	Publication date	Application number	Application date
US3703111 A	19721121	US19710104865	19710108
US3760658 A	19730925	US19720225163	19720210

Probable Assignee: GUIER W
Assignee(s):(std): GUIER W ; GUIER WILLIAM
Assignee(s): WILLIAM GUIER ; GUIER W US
Inventor(s):(std): GUIER W ; GUIER WILLIAM
Inventor(s): WILLIAM GUIER ; GUIER W US
International class
 (IPC 8-9): E21B19/16 (Advanced/Invention);
 E21B19/00 (Core/Invention)
International class
 (IPC 1-7): B25B1/18 B25B13/50
CPC: E21B19/16
European class: E21B19/16
US class: 81/57.34 81/573.4

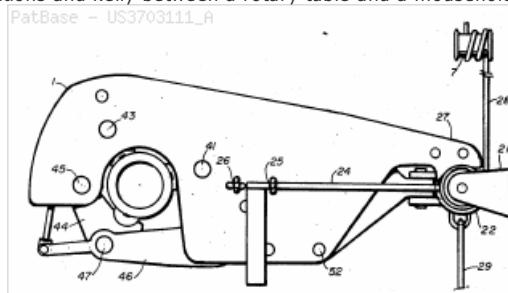
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Cited documents: US3703111 A, US3604718 A, US3505913 A, US3316783 A, US2871743 A, US2737839 A, US2649283 A, US2592229 A,

Forward Citations: WO8200428, WO18117853, WO16144186, WO02057592, USD750944, USD749924, USD748958, USD742707, USD739192, USD717619, USD431992, US9782876, US9434055, US8844616, US8235105, US7832470, US7188548, US6814140, US6138529, US5984025, US5845549, US5842390, US5390568, US5259275, US4759239, US4590823, US4475604, US4348920, US4082017, US3799009, US3760658, US2005061112, GB2553694, FR2488633, EP0202184, EP0185605, EP0123671, EP0123671,

Abstract:

A pair of tongs are suspended above the rotary table of an oil well, their jaws aligned to grip pipe which is screwed together, or unscrewed, in sections. The jaws of the tongs are actuated by a fluid-powered mechanism to obviate manual manipulation. The tongs are mounted and arranged so they may be swung with the pipe sections and Kelly between a rotary table and a mousehole.



Title: Coupling for tubing or casing and method of assembly

Priority: US19820379615 19820519 JP19830080235 19830510 CA19830428467 19830518
US19850802943 19851127 US19870117682 19871105 US19890345653 19890501
US19920954683 19920930 US19930156110 19931122 US19950396078 19950228
US19960664169 19960614

Family:	Publication number	Publication date	Application number	Application date
	AU198313622 A1	19831124	AU19830013622	19830418
	AU581397 B2	19890223	AU19830013622	19830418
	CA1216871 A1	19870120	CA19830428467	19830518
	DE3372517 D1	19870820	DE19833372517	19830415
	EP0094509 A2	19831123	EP19830103654	19830415
	EP0094509 A3	19840328	EP19830103654	19830415
	EP0094509 B1	19870715	EP19830103654	19830415
	JP1925969 C3	19950425	JP19830080235	19830510
	JP2125999 C3	19970128	JP19930203633	19930726
	JP5065756 B4	19930920	JP19830080235	19830510
	JP58203284 A2	19831126	JP19830080235	19830510
	JP6213378 A2	19940802	JP19930203633	19930726
	JP8030545 B4	19960327	JP19930203633	19930726
	NO164500 B	19900702	NO19830001704	19830513
	NO164500 C	19901010	NO19830001704	19830513
	NO831704 A	19831121	NO19830001704	19830513
	US4706997 A	19871117	US19850802943	19851127
	US4878285 A	19891107	US19870117682	19871105
	US5263748 A	19931123	US19920954683	19920930
	US5689871 A	19971125	US19960664169	19960614

Probable Assignee: CARSTENSEN KJ

Assignee(s):(std): CARSTENSEN KENNETH J ; KENISU JEE KAASUTENSEN ; KENISU JIEE KAASUTENSEN

Assignee(s): CARSTENSEN K J ; CARSTENSEN KJ ; KENNETH J CARSTENSEN

Inventor(s):(std): CARSTENSEN KENNETH J ; KENISU JEE KAASUTENSEN ; KENISU JIEE KAASUTENSEN

Inventor(s): KENNETH J CARSTENSEN

Agent(s): CALLINANS; FISHER ADAMS KELLY CALLINANS; SPRUSON AND FERGUSON; SMART AND BIGGAR; KOYAMA YUU

Designated states: DE FR GB NL

International class (IPC 8-9): E21B17/042 E21B17/08 E21B19/16 F16L15/00 F16L15/04 (Advanced/Invention); E21B17/042 (Advanced/Non-invention); E21B17/02 E21B19/00 F16L15/00 (Core/Invention)

International class (IPC 1-7): B21K21/16 B23P11/02 E21B17/042 E21B17/08 E21B19/16 F16L15/00 F16L15/04 F16L15/08 F16L19/03 F16L25/00

CPC: Y10T29/49872 Y10T29/49895 Y10T29/49964 Y10T29/49716 Y10T29/49771 Y10T29/4987 Y10T29/49881 E21B17/006 F16L15/003 E21B17/042 E21B17/08 E21B19/16

European class: E21B17/042 E21B17/08 E21B19/16 F16L15/00B4 P21B17/042

US class: 285/13 285/332.2 285/333 285/355 285/369 285/383 285/55 29/401.1 29/407.05 29/450 29/451 29/456 29/464 29/525.1 29/525.12

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Abstract:

Precision makeup at high speed of the most used forms of pipe and casing for production wells is assured by a novel coupling system. A pipe collar is provided with an internal precision makeup ring whose length along the pipe axis assures precise positioning and engagement. When the nose of the pipe is engaged with metal-to-metal contact against a reference shoulder on the precision ring a side surface on the nose end of the pipe engages a center seal ring disposed in the side wall of the collar between the reference shoulder and the threaded portion. This seal constitutes an effective barrier against the leakage of high internal pressures into the thread engagement region. End seals are mounted in grooves in the end recess portions of the collar, outside the threaded engagement region, to provide seals against external pressure, which can also vent internal pressures that are in excess of a predetermined threshold. With this arrangement, a modified standard collar or a manufactured collar can be placed on a pipe or casing off the drill rig floor, with the axial length of the precision ring being selected to assure makeup tightness adjusted to particular axial stress conditions. Makeup on the rig floor requires only stabbing of the next pipe section into the collar and engagement until metal-to-metal contact is achieved and seals are concurrently established. Pipes and collars can readily be prescreened to eliminate a minor proportion of elements whose thread tapers vary more than is permissible for the given conditions.

