

Title (en)

PROCESS FOR MANUFACTURING PIPES FOR THE PETROLEUM AND NATURAL GAS INDUSTRIES AND FOR DRILLING RODS

Publication

**EP 0184978 B1 19911227 (DE)**

Application

**EP 85730120 A 19850911**

Priority

DE 3445371 A 19841210

Abstract (en)

[origin: US4710245A] A method of making tubing and pipes for conduction in the oil and gas industry or for use as drillpipes, wherein such tubing is connected at both ends with connector sleeves by means of welding, the welding seam being deburred thereafter. The steel used for the tubing, pipes or drill pipes as well as for the connector sleeves has the following composition, all percentages by weight, between 0.2 and 0.6% carbon, between 0.5 and 1.8% manganese, between 0.5 and 3.5% combined chromium and molybdenum, not more than 0.2% phosphorus and not more than 0.005% sulphur. The combined unit of tubing and two welded on connectors is heated to a temperature which is at least 50 but not more than 200 degrees Centigrade above AC3; quenched from this temperature down to a temperature of at least 200 degrees Centigrade below AR1, tempered at a temperature below AC1, and cooled in non-moving air, to obtain the following properties: yield strength between 515 to 760 N/square mm, tensile strength at least 660 N/square mm, elongation at least 15.5%, hardness not more than 26 HRC, impact notch ductility at room temperature in accordance with ISOV of at least 60 Joules, long duration strength tested for more than 720 hours in accordance with NACE-TM-01-77 in a hydrogen sulphide saturated test solution at a load of not less than 80% of said minimum yield strength.

IPC 1-7

**C21D 9/14; C21D 9/50; C22C 38/22; E21B 17/00**

IPC 8 full level

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CPC (source: EP US)

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Cited by

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DOCDB simple family (publication)

**EP 0184978 A2 19860618; EP 0184978 A3 19880824; EP 0184978 B1 19911227;** CA 1245135 A 19881122; CN 1014908 B 19911127; CN 85107452 A 19860510; DE 3445371 A1 19860612; DE 3445371 C2 19871210; JP H0534558 B2 19930524; JP S61140694 A 19860627; NO 167096 B 19910624; NO 167096 C 19911002; NO 854641 L 19860611; US 4710245 A 19871201

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**EP 85730120 A 19850911;** CA 497033 A 19851206; CN 85107452 A 19851010; DE 3445371 A 19841210; JP 23088485 A 19851016; NO 854641 A 19851120; US 80676485 A 19851209