

Title (en)
HYDROFORMING FLUSH SYSTEM

Title (de)
HOCHDRUCKUMFORMSPÜLANLAGE

Title (fr)
SYSTEME D'HYDROFORMAGE AVEC RINCAGE

Publication
EP 1274523 B1 20040512 (EN)

Application
EP 01905537 A 20010213

Priority

- CA 0100164 W 20010213
- US 18378300 P 20000222

Abstract (en)
[origin: WO0162410A2] A hydroforming assembly (10) has a plurality of die structures (20, 21) that are mounted on a press for reciprocating movement between open and closed conditions. The die structures have cooperating die surfaces (22) defining a die cavity (23) when in the closed condition and receive a metallic tube blank (24) when in the open conditions. A hydroforming fluid supply system has tube-end engaging structures (25) that are movable to selectively and sealingly engage opposite ends of the tube blank. The hydroforming fluid supply system provides pressurized fluid into an interior of the tube blank (24) in order to expand the tube blank outwardly into conformity with the die cavity (23). A punch (52) extends within a passage (51) of at least one of the die structures. The punch (52) is movable between retracted and extended positions. A punch driving assembly (54) drives the punch between the retracted and extended positions to punch a hole into the expanded tube blank. A flushing system (30) communicates with the die cavity (23) providing a flushing fluid flow through the interior of the expanded tube blank.

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IPC 8 full level
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WO 0162410 A2 20010830; **WO 0162410 A3 20020711**; AU 3353401 A 20010903; BR 0108598 A 20021112; CA 2400730 A1 20010830; CA 2400730 C 20081007; CN 1283383 C 20061108; CN 1404423 A 20030319; DE 1274523 T1 20030528; DE 60103268 D1 20040617; DE 60103268 T2 20050525; EP 1274523 A2 20030115; EP 1274523 B1 20040512; JP 2003523286 A 20030805; JP 5016174 B2 20120905; KR 100667142 B1 20070112; KR 20020086557 A 20021118; MX PA02008154 A 20030523

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