

Title (en)  
APPARATUS FOR THE INTERNAL AND EXTERNAL QUENCHING OF TUBULAR WORK PIECES

Publication  
**EP 0267080 B1 19901107 (FR)**

Application  
**EP 87402230 A 19871007**

Priority  
FR 8614655 A 19861022

Abstract (en)  
[origin: US4848752A] An apparatus for providing the inner and outer quenching of tubular metallic pieces and more particularly of steel tubes, characterized in that it includes successively in the direction of movement of said tubes: a series of primary quenching annuli through which progresses the tube to be quenched, a weir tank filled with quenching liquid and formed with an inlet orifice for the tube to be quenched, said orifice being provided with a tight closing shutter and at least on high pressure quenching annulus, a plurality of guiding cylinders and rollers placed in the weir tank for the rotating progress of the tube travelling through the tank, means for providing for the inner quenching under pressure of the tube travelling through the tank and means for the recovery of the quenching liquid discharged from the weir tank, its filtration, its return and new rises in pressure for, on the one hand feeding the tank and, on the other hand, feeding under a high pressure the quenching annuli and inner pressure quenching means.

IPC 1-7  
**C21D 9/08**

IPC 8 full level  
**C21D 1/63** (2006.01); **C21D 9/08** (2006.01)

CPC (source: EP US)  
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**EP 0267080 A1 19880511; EP 0267080 B1 19901107**; AT E58179 T1 19901115; BR 8705558 A 19880524; DE 267080 T1 19880922; DE 3766072 D1 19901213; ES 2002086 A4 19880716; ES 2002086 B3 19910416; FR 2605645 A1 19880429; FR 2605645 B1 19890512; GR 3001382 T3 19920911; GR 880300104 T1 19881021; US 4848752 A 19890718

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