

Title (en)  
SIZING TOOL FOR EXPANDING TUBE ENDS

Publication  
**EP 0044795 B1 19850109 (FR)**

Application  
**EP 81420105 A 19810716**

Priority  
FR 8016173 A 19800718

Abstract (en)  
[origin: EP0044795A2] 1. Expansion head for an apparatus for flaring up or widening the ends of tubes, comprising essentially a body (1) with shifting means (2-2\*\*1 ) for a chuck (3) the tapering end (3\*\*1 ) of which is acting urgingly within the corresponding bore (5\*\*3 ) of a plurality of independent concentric jaws (5) in the form of sectors interconnected by a retaining elastic means (O) positioned within a circular groove (5\*\*4 ) established underneath the common colla (5\*\*5 ) for each one of the aforesaid jaws (5) in order to constitute the expansion head proper, the collar (5\*\*5 ) of which is abutted within the shouldered bore (4\*\*3 ) of a socket (4) secured at the end of the body (1), characterized in that all the retaining means (O and A) of the jaws (5) are disposed underneath their common collar (5\*\*5 ) to permit an extensive range of dimensions of the jaws (5) with the same socket (4), the elastic but collapsible means (A) of said jaws (5) relative to the bottom of said socket (4) being centered and positioned within a groove (5\*\*7 ) of the aforesaid jaws (5) while protruding alternately from the external diameter of the expansion head (T) for retaining same axially and vertically in combination on the one hand with the lower face (4\*\*4 ) of the socket (4) and on the other hand with the opposite collar (5\*\*5 ) abutted on the inside shouldering (4\*\*3 ) of said socket (4).

IPC 1-7  
**B21D 41/02**

IPC 8 full level  
**B21D 41/02** (2006.01)

CPC (source: EP)  
**B21D 41/026** (2013.01)

Cited by  
DE102012100894A1; DE202012104450U1; DE202010004948U1; WO2011128049A1; CH699306A1; DE202019107067U1; DE4202348C1; EP0619152A1; EP0206835A3; AU20111240323B2; AU2011240323C1; WO2013113509A1

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**EP 0044795 A2 19820127; EP 0044795 A3 19820512; EP 0044795 B1 19850109;** AT E11115 T1 19850115; BE 889656 A 19811116; CH 641383 A5 19840229; DE 3168139 D1 19850221; DE 44795 T1 19830804; DK 309481 A 19820119; FI 812242 L 19820119; FR 2486834 A1 19820122; FR 2486834 B1 19850405; IT 1138063 B 19860910; IT 8122943 A0 19810715; NO 153720 B 19860203; NO 153720 C 19860514; NO 812413 L 19820119

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