

Title (en)

Tube end enlarging or expanding tool.

Title (de)

Aufweitwerkzeug für Rohrenden.

Title (fr)

Appareil destiné à élargir ou évaser les extrémités des tubes.

Publication

EP 0397570 A1 19901114 (FR)

Application

EP 90401241 A 19900510

Priority

FR 8906448 A 19890512

Abstract (en)

The subject of the invention is a novel apparatus intended for enlarging the ends of tubes which comprises a body (1), an expansion tool, a mandrel (2), a connecting link (3) and two handles, one (7) of which is solidly fixed to the body while the other (4) is connected to the said body by means of the connecting link which imparts to it a movable pointer bearing enabling it to transmit to the mandrel, to which it is connected by means of a direct articulation, an axial force which increases as the said movable handle approaches the fixed handle. Once the expansion of the pipe has been carried out, the mandrel is extracted from inside the set of jaws of the tool by means of the traction force which is exerted thereon by the movable arm which the operator brings back to its initial position. This apparatus makes it possible to produce the fittings required for connecting the copper piping of sanitary installations. <IMAGE>

IPC 1-7

B21D 41/02

IPC 8 full level

B21D 41/02 (2006.01)

CPC (source: EP)

B21D 41/026 (2013.01)

Citation (search report)

- [X] EP 0309699 A2 19890405 - ROTHENBERGER WERKZEUGE MASCH [DE]
- [X] EP 0252868 A2 19880113 - EMERSON ELECTRIC CO [US]
- [A] WO 8100364 A1 19810219 - RAST PATENT MFG LTD [AU], et al

Cited by

CN106142527A; EP1160027A1; FR2809651A1; US11819902B2; US11633775B2; US6672128B2; US10000007B2; US10946576B2; US8517715B2; US8763439B2; US9914260B2; US11596999B2; US11779990B2; US9862137B2; US9993961B2; US10926451B2; US11648727B2; US12023849B2

Designated contracting state (EPC)

CH DE ES FR GB GR IT LI SE

DOCDB simple family (publication)

EP 0397570 A1 19901114; **EP 0397570 B1 19940727**; DE 69010980 D1 19940901; DE 69010980 T2 19950223; FR 2646792 A1 19901116; FR 2646792 B1 19950224

DOCDB simple family (application)

EP 90401241 A 19900510; DE 69010980 T 19900510; FR 8906448 A 19890512