

Title (en)
Apparatus for cold working of metal rod.

Title (de)
Vorrichtung zur Kaltbearbeitung von Metallstangen.

Title (fr)
Appareil pour le travail à froid de barres métalliques.

Publication
EP 0085806 A1 19830817 (EN)

Application
EP 82306141 A 19821118

Priority
• GB 8134661 A 19811118
• GB 8134662 A 19811118
• GB 8134663 A 19811118

Abstract (en)
Apparatus for the cold working or hot rolled steel rod comprises a set of freely rotatable pulleys (18, 20) around which the rod runs. The set of pulleys as a whole is driven for orbital revolution. The rod is twisted in one direction as it enters the pulley system and is untwisted as it leaves. The rod is pulled through the pulley system by a rotatable coiler downstream of the system against braking effort imparted to the rod upstream of the system whereby the rod is pulled through under tension. Drive (24,26) for the orbital motion is from the coiler such that the orbital speed and rod feed are in a fixed relationship. Control of the transverse dimensions of the rod is imparted by a sensor downstream of the pulley system, the output from which is used to adjust the tension imparted by the braking pulley (34). The apparatus operates also to descale and straighten the rod continuously and is particularly useful in the production of steel rod for welded mesh in reinforcing concrete.

IPC 1-7
B21C 37/00; B21D 11/15

IPC 8 full level
B21C 1/02 (2006.01); **B21C 1/12** (2006.01); **B21C 43/04** (2006.01); **B21D 3/05** (2006.01); **B21D 3/12** (2006.01); **B21F 1/02** (2006.01); **B21F 7/00** (2006.01); **B21F 9/00** (2006.01); **C21D 7/10** (2006.01)

CPC (source: EP)
B21C 1/02 (2013.01); **B21C 1/12** (2013.01); **B21C 43/04** (2013.01); **B21D 3/05** (2013.01); **B21D 3/12** (2013.01); **B21F 1/02** (2013.01); **B21F 1/023** (2013.01); **B21F 7/00** (2013.01); **B21F 9/00** (2013.01); **C21D 7/105** (2013.01)

Citation (search report)
• [AD] DE 909562 C 19540422 - ALFRED OTTO KOLLING
• [X] US 4075880 A 19780228 - COPELAND WILLIAM RAEBURN
• [X] GB 1442097 A 19760707 - VOEST AG
• [Y] DE 1009586 C
• [Y] FR 1565871 A 19690502
• [A] DE 1452201 A1 19691030 - ALBERT FRIEDRICH WILHELM
• [A] DE 825245 C 19520114 - FELTEN & GUILLEAUME CARLSWERK

Cited by
CN112247024A; CN103272880A; CN117299846A

Designated contracting state (EPC)
AT BE CH DE FR GB IT LI LU NL SE

DOCDB simple family (publication)
EP 0085806 A1 19830817

DOCDB simple family (application)
EP 82306141 A 19821118