

Title (en)

Partially thick-walled elongated metallic member and methods of making and connecting the same.

Title (de)

Längliche Metallelemente mit bereichsweise verdickter Wand und Verfahren zu deren Herstellung und Verbindung.

Title (fr)

Élément métallique allongé à paroi partiellement épaisse et procédé pour la fabrication et la connection de celle-ci.

Publication

EP 0672475 A1 19950920 (EN)

Application

EP 94309896 A 19941229

Priority

- JP 2316794 A 19940124
- JP 5988994 A 19940304
- JP 15674494 A 19940614

Abstract (en)

A method of and an apparatus for manufacturing an elongated metallic member (1) having at least one thickened wall area defined at a portion thereof. That portion of the elongated metallic member (1) is heated to a plasticizable temperature to form a heated area (5) while the latter is moved along the metallic member (1) and, at the same time, axially inwardly compressed to allow upsetting at the heated area (5), to thereby form a thickened wall area. A trailing portion (1a) of the thickened wall area of the elongated metallic member (1) immediately after the heated area (5) is cooled. The ratio (V/W) of a compressing speed V relative to the moving speed W of the position of the heated area (5) in reference to the thickened portion (1a) of the metallic member (1) is progressively increased from a small value, employed at an initial stage of wall thickening, along the metallic member (1) to an aimed value, employed at a steady stage of wall thickening, to thereby progressively increase a wall thickening ratio along the metallic member (1) to a designed value. The subsequent wall thickening is carried out while the ratio is maintained at said designed value for the steady stage of wall thickening. A method of connecting two metallic members (1) in end-to-end fashion and a method of connecting a beam to the metallic member (1) are also disclosed. <IMAGE>

IPC 1-7

B21C 37/16; **B21J 5/08**

IPC 8 full level

B21C 37/15 (2006.01); **B21C 37/16** (2006.01); **B21J 5/08** (2006.01); **B21J 9/08** (2006.01); **E04B 1/24** (2006.01)

CPC (source: EP)

B21C 37/15 (2013.01); **B21C 37/16** (2013.01); **B21J 5/08** (2013.01); **B21J 9/08** (2013.01); **E04B 1/24** (2013.01); **E04B 2001/2415** (2013.01); **E04B 2001/2418** (2013.01); **E04B 2001/2445** (2013.01); **E04B 2001/2448** (2013.01); **E04B 2001/2451** (2013.01); **E04B 2001/2454** (2013.01); **E04B 2001/2457** (2013.01); **E04B 2001/246** (2013.01); **E04B 2001/2472** (2013.01); **E04B 2001/2496** (2013.01)

Citation (search report)

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- [YA] PATENT ABSTRACTS OF JAPAN vol. 9, no. 124 (M - 383) 29 May 1985 (1985-05-29)
- [DA] PATENT ABSTRACTS OF JAPAN vol. 15, no. 491 (M - 1190) 12 December 1991 (1991-12-12)
- [A] PATENT ABSTRACTS OF JAPAN vol. 15, no. 404 (M - 1168) 15 October 1991 (1991-10-15)

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Designated contracting state (EPC)

DE FR GB

DOCDB simple family (publication)

EP 0672475 A1 19950920; **EP 0672475 B1 20000607**; DE 69424857 D1 20000713; DE 69424857 T2 20001228

DOCDB simple family (application)

EP 94309896 A 19941229; DE 69424857 T 19941229