Title (en)

PROCESS FOR FITTING COMPONENTS ROTATIONALLY FIXEDLY ON A SHAFT

Title (de)

VERFAHREN ZUM DREHFESTEN ANORDNEN VON TEILEN AUF EINER WELLE

Title (fr)

PROCEDE POUR MONTER DES PIECES SUR UN ARBRE DE FA ON QU'ELLES SOIENT SOLIDAIRES DE CELUI-CI EN ROTATION

Publication

EP 0912269 B1 20000126 (DE)

Application

EP 97927056 A 19970528

Priority

- DE 19625555 A 19960626
- EP 9702752 W 19970528

Abstract (en)

[origin: DE19625555A1] In order to secure components (2) like cams, pinions, discs, etc., rotationally fixedly on a hollow shaft (1), it is proposed, after the fitting of components with a small clearance (3) on the shaft, to expand the shaft by passing an expanding ram (5) through it and thus produce at least a force fit between the shaft and the components. A particularly firm bond can be obtained if the drillings in the components have a contour into which the shaft material force outwards by the expanding ram is pressed. The shaft can be expanded in steps if a ram with a stepped increase in its effective diameter or several rams of increasing diameters is/are used. The increase of the traction force exerted on the ram (5) can be sensed and used as an indicator allowing to know if the fitting desired for the components (2) has been reached.

IPC 1-7 (main, further and additional classification)

B21D 53/84; B21D 39/06

IPC 8 full level (invention and additional information)

B21D 39/06 (2006.01); **B21D 53/84** (2006.01)

CPC (invention and additional information)

B21D 53/845 (2013.01); **B21D 39/06** (2013.01); **B21K 1/063** (2013.01); Y10T 29/49293 (2013.01); Y10T 29/49776 (2013.01); Y10T 29/4994 (2013.01); Y10T 29/53065 (2013.01)

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