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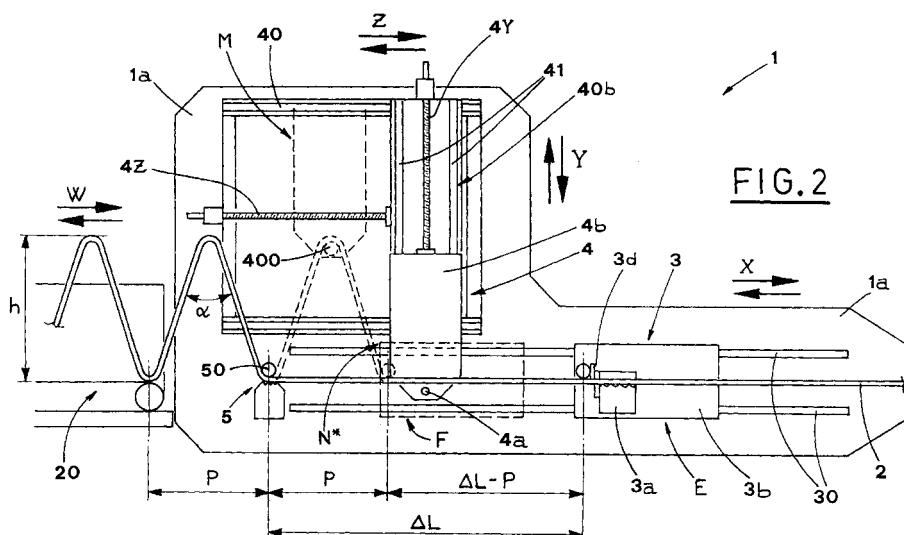
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(54) **Machine for bending threadlike metallic elements, in particular round bars**

(57) A machine for bending threadlike metallic elements, in particular round bars, includes a bending station (1) for shaping the threadlike metallic elements (2). The bending station (1) includes a first working group (4), which moves along relative Cartesian axes, first (Y) and second (Z), and is equipped with means (4a) for striking the threadlike metallic elements (2). The first working group (4) moves between a rest position (N*), in which the striking means (4a) do not touch the threadlike metallic elements (2), and a working position (M), in which the striking means (4a) push the threadlike metallic elements (2). First motionless gripping means (5)

clamp and/or release the threadlike metallic elements (2) in phase relation with the movement of the first working group (4). A second working group (3), substantially aligned with the first gripping means (5) has second gripping means (3a), which clamp and/or release the threadlike metallic elements (2) in phase relation with the movement of the first working group (4). The second working group (3) moves along a third axis (X), substantially parallel to the second axis (Z), in phase relation with the movement of the first working group (4) and with the clamping and/or releasing of the first gripping means (5).





European Patent
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EUROPEAN SEARCH REPORT

Application Number
EP 01 12 4020

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.7)
X	FR 2 394 339 A (DAVUM) 12 January 1979 (1979-01-12) * page 3, line 12 - page 3, line 33 * * page 4, line 32 - page 5, line 7; figures 1,10 *	1,2,6,8	B21F1/04 B21F27/20
X	US 3 626 567 A (CRUGER ROBERT W ET AL) 14 December 1971 (1971-12-14) * column 6, line 44 - column 7, line 25; figures 1,4 *	1,2,6,8	
A	US 4 291 732 A (ARTZER RICHARD F) 29 September 1981 (1981-09-29) * column 1, line 53 - line 68 * * column 3, line 44 - line 54 * * column 8, line 14 - column 9, line 27 * * column 10, line 17 - line 54; figures 4,5 *	1,2,4,6-8	
A	GB 565 797 A (DOUGLAS HAROLD GREEN; TRUSSED CONCRETE STEEL COMPANY) 28 November 1944 (1944-11-28) * page 3, line 34 - page 4, line 58; figure 1 *	1,6-8	TECHNICAL FIELDS SEARCHED (Int.Cl.7) B21F
A	EP 0 140 859 A (WIREWOOD INT AB) 8 May 1985 (1985-05-08) * figure 1 *	1	
The present search report has been drawn up for all claims			
Place of search MUNICH		Date of completion of the search 3 June 2003	Examiner Ritter, F
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document			

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**ANNEX TO THE EUROPEAN SEARCH REPORT
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This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report.
The members are as contained in the European Patent Office EDP file on
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