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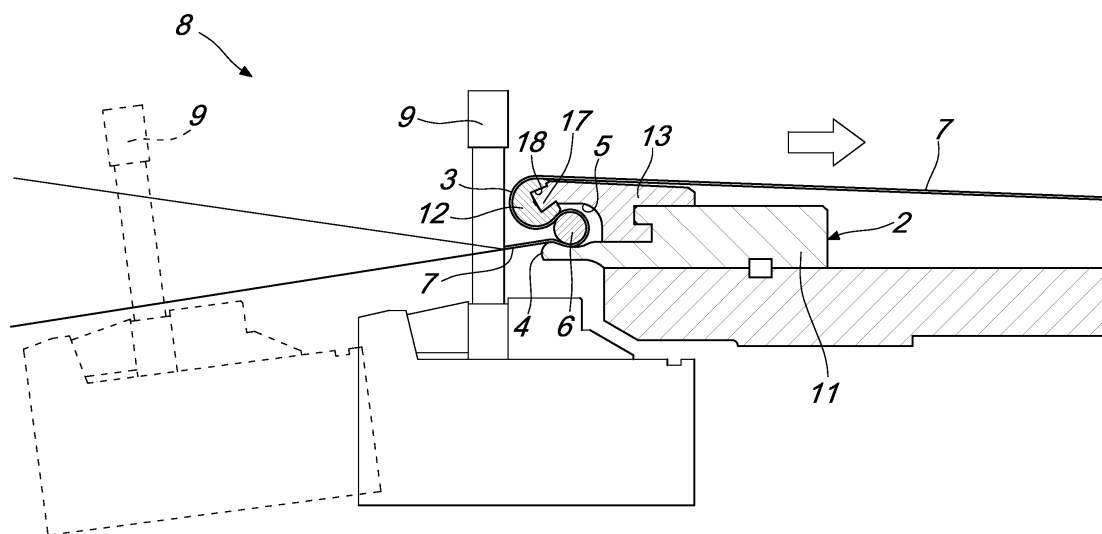
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(54) **Full-height temple for textile looms and the like**

(57) A full-height temple (1) for textile looms and the like, comprising a main body (2) provided with an upper profile (3) and a lower profile (4) which are adapted to delimit a linear slot (5), which is defined by the main body (2), is substantially C-shaped and is adapted to accommodate with play a movable bar (6) around which a fabric (7) woven by a textile loom (8) is partially wrapped; the main body (2) is fixable to the textile loom (8) proximate to the comb (9) of the textile loom (8) and is arrangeable

downstream of this comb (9) with respect to the direction of advancement of the fabric (7) woven by the textile loom (8), so that the linear slot (5) is parallel to the direction of the weft threads of the fabric (7) with its open side directed toward the comb (9), the full-height temple comprising means (10) for adjusting the longitudinal extension of the main body (2) along a direction which is substantially parallel to the direction of the weft threads of the fabric (7) in order to vary the weaving width of the temple (1) as a function of the desired height of the fabric (7).



*Fig. 2*

## Description

[0001] The present invention relates to a full-height temple for textile looms and the like.

[0002] In the textiles field equipment is known which is used in weaving in order to prevent drawing-in of the fabric during weaving. Such items of equipment are commonly called temples, which can be of several different types.

[0003] The conventional temple consists of a linear structure which is provided with metallic teeth at its ends, is made of wood or metal and is constituted by a rod that slides telescopically between two other rods which are all kept parallel by straps and are provided with locking catches in order to adjust the overall length of the rods to the height of the fabric.

[0004] In mechanized frames the temple is a metal tube which is fixed to the textile loom with two arms which are provided with toothed heads in such a way that the fabric, during weaving, while tending to contract in the direction of the weft owing to the settling of the weft thread which, when it is inserted by the shuttle, is rectilinear and, when it is beaten by the comb, settles between the threads of the warp thus assuming a winding shape, is held by the teeth at the selvages thus preventing them from drawing closer together.

[0005] In this manner, the weft thread is forced to settle on the warp threads by taking a longer route than it would otherwise have done without the presence of the temple, thus preventing the shortening of the fabric along the direction of weft.

[0006] Such temples of the conventional and mechanized type are not devoid of drawbacks, including the fact that the teeth with which they are provided leave holes which are visible on the selvedge of the fabric, once finished.

[0007] In order to overcome this drawback, so-called "full-height" temples have been devised which consist of a rod-like body which is arranged downstream of the comb of the textile loom parallel to the direction of weft and extending for the entire weaving width.

[0008] Such rod-like body has a longitudinal groove which is substantially C-shaped, is directed toward the comb and accommodates a movable bar around which the fabric is partially wrapped.

[0009] In more detail, the fabric that comes from the comb is initially made to slide on the lower profile of the groove, then to pass behind the movable bar, in order to then come out from the groove again, sliding on the upper profile of the groove.

[0010] In this way, when the fabric is placed under tension, the movable bar is pushed against the two profiles of the C in such a manner as to flatten the fabric against the profiles of the C thus forcing the weft threads to assume a progression that is perfectly rectilinear and not undulating, as described previously, which causes the shortening of the height of the fabric.

[0011] These latter conventional temples are also not

devoid of drawbacks, including the fact that, being they provided monolithically and usually made by extrusion, are not adjustable in length, thus making it necessary to have a temple for each weaving width desired.

[0012] This necessity leads to having an inevitable increase in the costs of acquisition/production of the set of temples in proportion to the number of weaving widths to be woven, in order to be able to cover them all.

[0013] Another drawback of conventional temples consists in that, if the need arises to weave a weaving width that is not catered for, the operator is forced to stop work until a temple of suitable length is obtained.

[0014] An additional drawback of conventional temples, which is linked to the previous drawback, consists in that, when a tailor-made temple is acquired/produced in order to be able to work with a weaving width which is outside the normal working activity, the temple provided, once used, would then be placed in storage and remain unused.

[0015] The aim of the present invention consists in providing a full-height temple for textile looms and the like, which makes it possible to work with multiple weaving lengths in a simple and efficient manner.

[0016] Within this aim, an object of the present invention consists in providing a temple that is structurally simple, sturdy and economically advantageous when compared to the sets of temples that are necessary in order to be able to weave the same weaving widths.

[0017] This aim and this and other objects which will become better apparent hereinafter are achieved by a full-height temple for textile looms and the like, comprising a main body provided with an upper profile and a lower profile which are adapted to delimit a linear groove, which is defined by said main body, is substantially C-shaped and is adapted to accommodate with play a movable bar around which a fabric woven by a textile loom is partially wrapped, said main body being fixable to said textile loom proximate to the comb of said textile loom and being arrangeable downstream of said comb with respect to the direction of advancement of said fabric woven by said textile loom, so that said linear groove is parallel to the direction of the weft threads of said fabric with its open side directed toward said comb, **characterized in that** it comprises means for adjusting the longitudinal extension of said main body along a direction which is substantially parallel to the direction of the weft threads of said fabric in order to vary the weaving width of said temple as a function of the desired height of said fabric.

[0018] Further characteristics and advantages of the present invention will become better apparent from the description of a preferred, but not exclusive, embodiment of a full-height temple for textile looms and the like, according to the invention, illustrated by way of non-limiting example in the accompanying drawings, wherein:

Figure 1 is a perspective view of an embodiment of the full-height temple, according to the invention;

Figure 2 is a schematic side elevation view of a textile loom using the temple shown in Figure 1.

**[0019]** With reference to the figures, a full-height temple for textile looms and the like, generally designated with the reference numeral 1, comprises a main body 2 which is provided with an upper profile 3 and a lower profile 4 which are adapted to delimit a linear groove 5, which is defined by the main body 2, is substantially C-shaped and is adapted to accommodate with play a movable bar 6, which has a substantially circular transverse cross-section, around which a fabric 7 woven by a textile loom 8 is partially wrapped.

**[0020]** As shown in Figure 2, the main body 2 is fixable to the textile loom 8 proximate to the comb 9 of the textile loom 8 and is arrangeable downstream of the comb 9 with respect to the direction of advancement of the fabric 7 being woven, so that the linear groove 5 is parallel to the direction of the weft threads of the fabric 7 with its open side directed toward the comb 9.

**[0021]** According to the invention, means 10 are provided for adjusting the longitudinal extension of the main body 2 along a direction which is substantially parallel to the direction of the weft threads of the fabric 7 in order to vary the weaving width of the temple 1 as a function of the desired height of the fabric 7.

**[0022]** More specifically, such adjustment means 10 comprise a plurality of modular elements 11 which can be mutually aligned and can be fixed to the textile loom 8 in order to reach the desired length of the temple 1.

**[0023]** More precisely, the upper profile 3 of the main body 2 is defined by a fixed bar 12 of substantially the same length as the desired length of the temple 1 and is associable with the modular elements 11 by way of a shape mating which will be better described hereinafter.

**[0024]** Advantageously, both the fixed bar 12 and the movable bar 6 have a substantially circular transverse cross-section in such a manner as to allow the sliding of the fabric 7 without damaging it.

**[0025]** In the same way, the lower profile 4 also has a substantially rounded edge.

**[0026]** For each modular element 11, a plurality of supports 13 is provided, which protrude upward from the modular element 11, are mutually equidistant along the longitudinal extension of the modular element 11, and have each a tab 17 that can be engaged by way of a dovetail coupling or the like in a corresponding shaped groove 18 defined along the fixed bar 12.

**[0027]** In this way, the shape mating is achieved between the fixed bar 12 and the modular elements 11, thus obtaining a single, structurally sturdy structure which is capable of withstanding the stresses caused by the weaving of the fabric 7.

**[0028]** More precisely, the supports 13 have a transverse shape which is substantially T-shaped with the shank and one end of the head of the T fixed in undercut to the modular element 11 and the other end of the head of the T providing the tab 17.

**[0029]** The temple 1 thus obtained, being constituted by elements that can be fitted to each other, can be provided, in a simple and rapid manner, of any length according to the requirements.

**[0030]** In practice it has been found that the full-height temple for textile looms and the like, according to the present invention, fully achieves the intended aim and object in that it makes it possible to vary the longitudinal length thereof according to the height of the fabric to be woven without changing the temple completely, but simply by adding or removing modular elements.

**[0031]** Another advantage of the full-height temple, according to the present invention, consists in that it enables the weaving of fabrics with different heights while involving an economic investment which is decidedly lower than the cost that would be required by availing of conventional temples.

**[0032]** The improved full-height temple for textile looms and the like, according to the present invention, thus conceived, is susceptible of numerous modifications and variations, all of which are within the scope of the appended claims.

**[0033]** Moreover, all the details may be substituted by other, technically equivalent elements.

**[0034]** In practice the materials employed, provided they are compatible with the specific use, as well as the contingent dimensions and shapes, may be any according to requirements and to the state of the art.

**[0035]** The disclosures in Italian Patent Application No. MI2011A002161 from which this application claims priority are incorporated herein by reference.

**[0036]** Where technical features mentioned in any claim are followed by reference signs, those reference signs have been included for the sole purpose of increasing the intelligibility of the claims and accordingly, such reference signs do not have any limiting effect on the interpretation of each element identified by way of example by such reference signs.

## Claims

1. A full-height temple (1) for textile looms and the like, comprising a main body (2) provided with an upper profile (3) and a lower profile (4) which are adapted to delimit a linear groove (5), which is defined by said main body (2), is substantially C-shaped and is adapted to accommodate with play a movable bar (6) around which a fabric (7) woven by a textile loom (8) is partially wrapped, said main body (2) being fixable to said textile loom (8) proximate to the comb (9) of said textile loom (8) and being arrangeable downstream of said comb (9) with respect to the direction of advancement of said fabric (7) woven by said textile loom (8), so that said linear groove (5) is parallel to the direction of the weft threads of said fabric (7) with its open side directed toward said comb (9), **characterized in that** it comprises means

(10) for adjusting the longitudinal extension of said main body (2) along a direction which is substantially parallel to the direction of the weft threads of said fabric (7) in order to vary the weaving width of said temple (1) as a function of the desired height of said fabric (7). 5

2. The temple (1) according to claim 1, **characterized in that** said adjustment means (10) comprise a plurality of modular elements (11) which can be mutually aligned and can be fixed to said textile loom (8) in order to reach the desired length of said temple (1). 10
3. The temple (1) according to claims 1 or 2, **characterized in that** said upper profile (3) is defined by a fixed bar (12) that is substantially as long as said desired length of said temple (1) and can be associated with said modular elements (11) by shape mating. 15  
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4. The temple (1) according to one or more of the preceding claims, **characterized in that** said fixed bar (12) has a substantially circular transverse cross-section. 25
5. The temple (1) according to one or more of the preceding claims, **characterized in that** said movable bar (6) has a substantially circular transverse cross-section. 30
6. The temple (1) according to one or more of the preceding claims, **characterized in that** said lower profile (4) has a substantially rounded edge.
7. The temple (1) according to one or more of the preceding claims, **characterized in that** it comprises, for each one of said modular elements (11), a plurality of supports (13) which protrude upwardly from said modular elements (11), each having a tab (17) that can be engaged by way of a dovetail coupling or the like in a corresponding shaped groove (18) defined along said fixed bar (12). 35  
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8. The temple (1) according to claim 7, **characterized in that** said supports (13) are mutually equidistant along the longitudinal extension of said modular element (11). 45
9. A textile loom (8), **characterized in that** it comprises a temple (1) according to one or more of the preceding claims. 50

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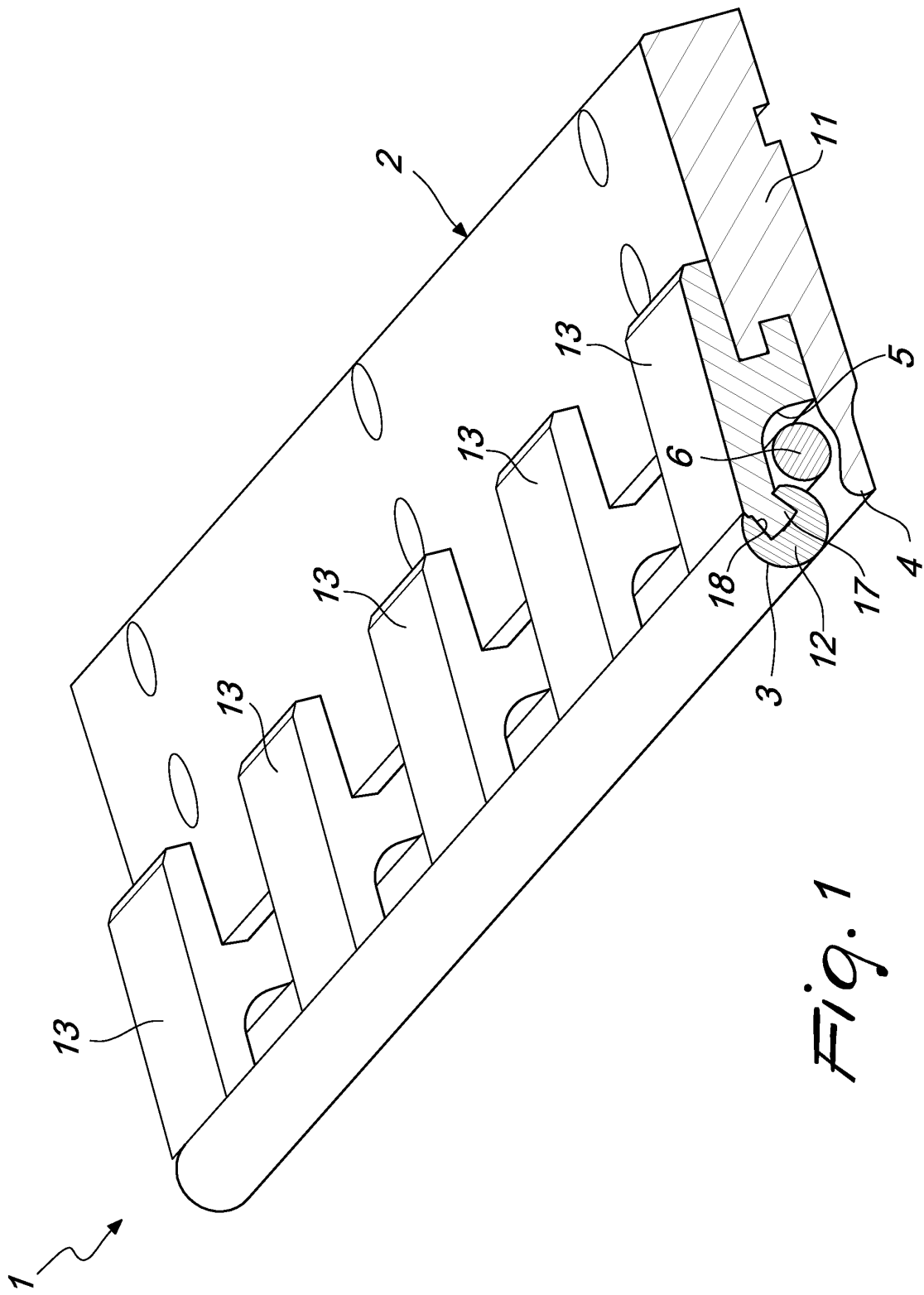
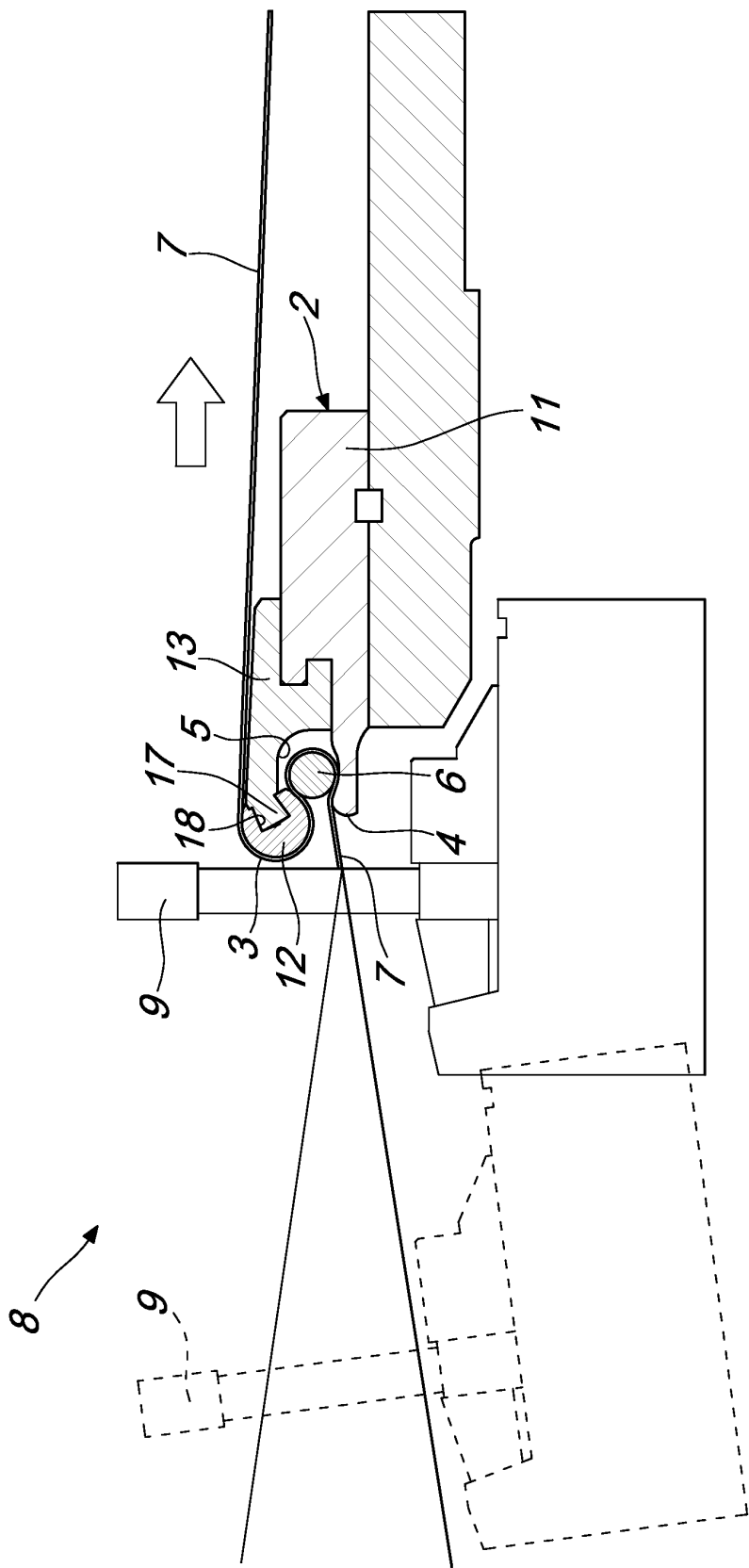


Fig. 1





## EUROPEAN SEARCH REPORT

Application Number  
EP 12 19 3873

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
X	US 3 885 600 A (ALTMANN JACK G) 27 May 1975 (1975-05-27) * claims 1,2; figures 3,4,5 *	1-9	INV. D03J1/22
A	DE 103 36 769 A1 (VAUPEL TEXTILMASCHINEN GMBH & [DE]) 10 March 2005 (2005-03-10) * figures 1-4 *	1-9	
A	JP 2002 069803 A (HIRAGA HIDEO) 8 March 2002 (2002-03-08) * abstract; figures 1-5 *	1	
The present search report has been drawn up for all claims			TECHNICAL FIELDS SEARCHED (IPC)
			D03J
Place of search		Date of completion of the search	Examiner
Munich		11 March 2013	Iamandi, Daniela
<p>CATEGORY OF CITED DOCUMENTS</p> <p>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</p> <p>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 ..... &amp; : member of the same patent family, corresponding document</p>			

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EPO FORM 1503 03/82 (P04C01)

**ANNEX TO THE EUROPEAN SEARCH REPORT  
ON EUROPEAN PATENT APPLICATION NO.**

EP 12 19 3873

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11-03-2013

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
US 3885600	A	27-05-1975	NONE	
-----				
DE 10336769	A1	10-03-2005	NONE	
-----				
JP 2002069803	A	08-03-2002	JP 3515500 B2	05-04-2004
			JP 2002069803 A	08-03-2002
-----				

EPO FORM P0459

For more details about this annex : see Official Journal of the European Patent Office, No. 12/82



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**Patent documents cited in the description**

- IT MI20112161 A [0035]