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(54) Security lock

(57) Security lock having a metal strip (1) that has multiple almost-semicircular equidistantly aligned cut-outs (1.1) that form a rack in the metal strip (1), so that each space between the serrations is directly opposite the deep step (2.1) of a rotating shaft so that during locking the non-stepped part (2.2) of the shaft (2) is inserted in the cut-out (1.1) of the serration, and when it is positioned opposite, it frees the metal strip (1) and allows its withdrawal.

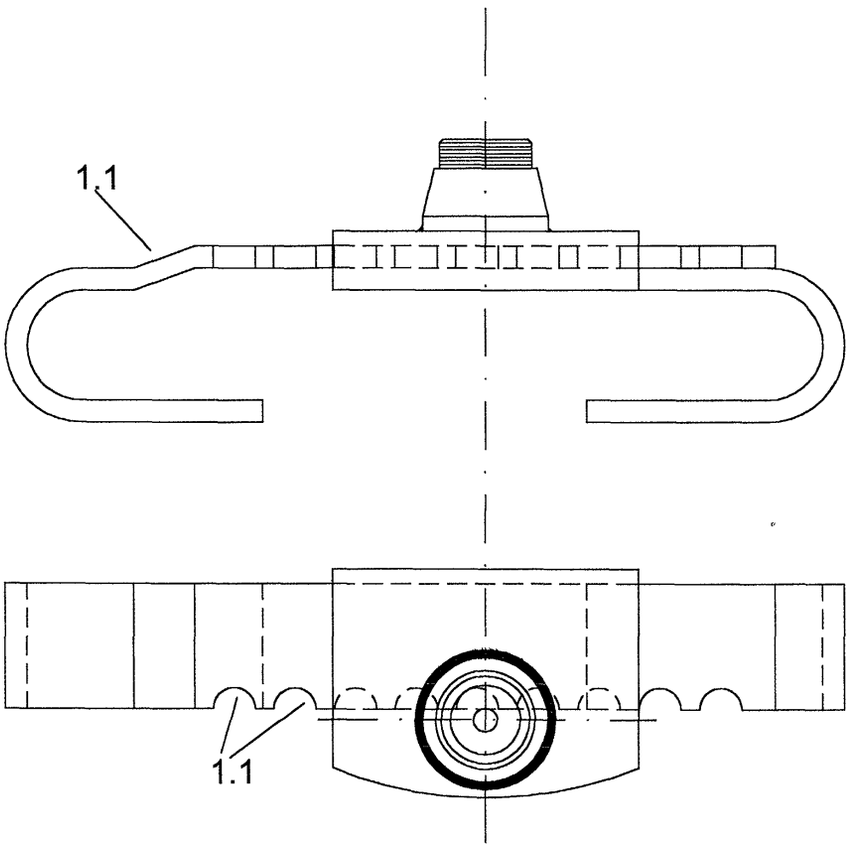

FIG.2

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Description

PURPOSE OF THE INVENTION

[0001] This invention refers to a security lock, of the type installed in trailers, containers, trucks or other means of transport, of those that have blocking metal strips or bars flanking the bolt and fixed to the ends of the parts to be closed.

[0002] This invention is characterised by a series of nearly semicircular cut-outs of the fastening metal strip, forming a rack directly opposite the step of a rotary shaft that locks or frees the metal strip, depending on its position.

BACKGROUND OF THE INVENTION

[0003] The security locks of the different means of transport are very well-known and widely used, many existing that have in common the use of resistant materials and very robust construction, both in the lock and in the securing metal bars or strips of the door and the nearest locking section cross-bar, or, directly, of the overlapping doors.

[0004] The applicant is unaware of the existence of security locks with the characteristics of those detailed herein.

DESCRIPTION OF THE INVENTION

[0005] This invention refers to a security lock, among those installed in trailers, containers, trucks or any other conventional means of transport, requiring only that the nearest locking cross-bar be of sufficient rigidity and consistency.

[0006] This invention is characterised by a series of multiple equidistantly aligned cut-outs of the end of the metal strip, at the end of the locking curve, that, in turn, is fixed to the conventional bar of the vertical bolt of the doors, or also conventional bar of the door and bridge, incorporated in the fixed part of the side fastening cross-bar.

[0007] These nearly semicircular cut-outs form a rack in the metal strip, so that each space between the teeth is placed directly opposite the deep step of a rotary shaft, that links to the conventional part, the cylinder, so that for locking, the non-stepped part of the shaft is inserted in the serrated hollow, and, when positioned opposite, it frees the metal strip and allows its extraction.

[0008] Finally, the main part of the lock, beneath the cylinder, has a side cut-out along the bottom of which the metal strip slides, and that, once slotted, it is covered by a locking piece, that allows free movement of the metal strip and prevents its withdrawal, similarly to what the back of the cut-out, joined to the insertion cone of the cylinder, does.

DESCRIPTION OF THE DRAWINGS

[0009] This descriptive report is complemented by, a set of drawings, where, by way of illustration and non-restrictively, the preferred example of the invention is represented.

[0010] Figure 1 shows the serrated metal strip in accordance with the description of the preferred embodiment of this invention.

[0011] Figure 2 shows the two main cross-sections of the invention.

[0012] Figure 3 shows a partly sectioned blow-up of the lock, where the path of the metal strip and of the shaft can be seen.

PREFERRED EMBODIMENT OF THE INVENTION

[0013] This invention refers to a security lock among those that have metal strips or locking bars, characterised because the metal strip (1) has multiple almost-semicircular equidistantly aligned cut-outs (1.1) that form a rack (1.1) in the metal strip (1), so that each space between the teeth is directly opposite the deep step (2.1) of a rotating shaft (2) so that when locked the non-stepped part (2.2) of the shaft (2) is inserted in the serration cut-out (1.1), when it is in the opposite position it frees the metal strip (1) and allows its withdrawal.

[0014] The essence of this invention is not altered by variations in materials, shape, size or layout of the component parts, non restrictively described, this being sufficient for an expert to undertake its reproduction.

Claims

1. Security lock, among the type that have metal strips or locking bars, **characterised** because the metal strip has multiple almost-semicircular equidistantly aligned cut-outs (1.1) that form a rack (1.1) in the metal strip (1), so that each space between the serrations is directly opposite the deep step (2.1) of a rotating shaft (2) so that during locking the non-stepped part (2.2) of the shaft (20 is inserted in the cut-out (1.1) of the serration, and when it is positioned opposite, it frees the metal strip (1) and allows its withdrawal.

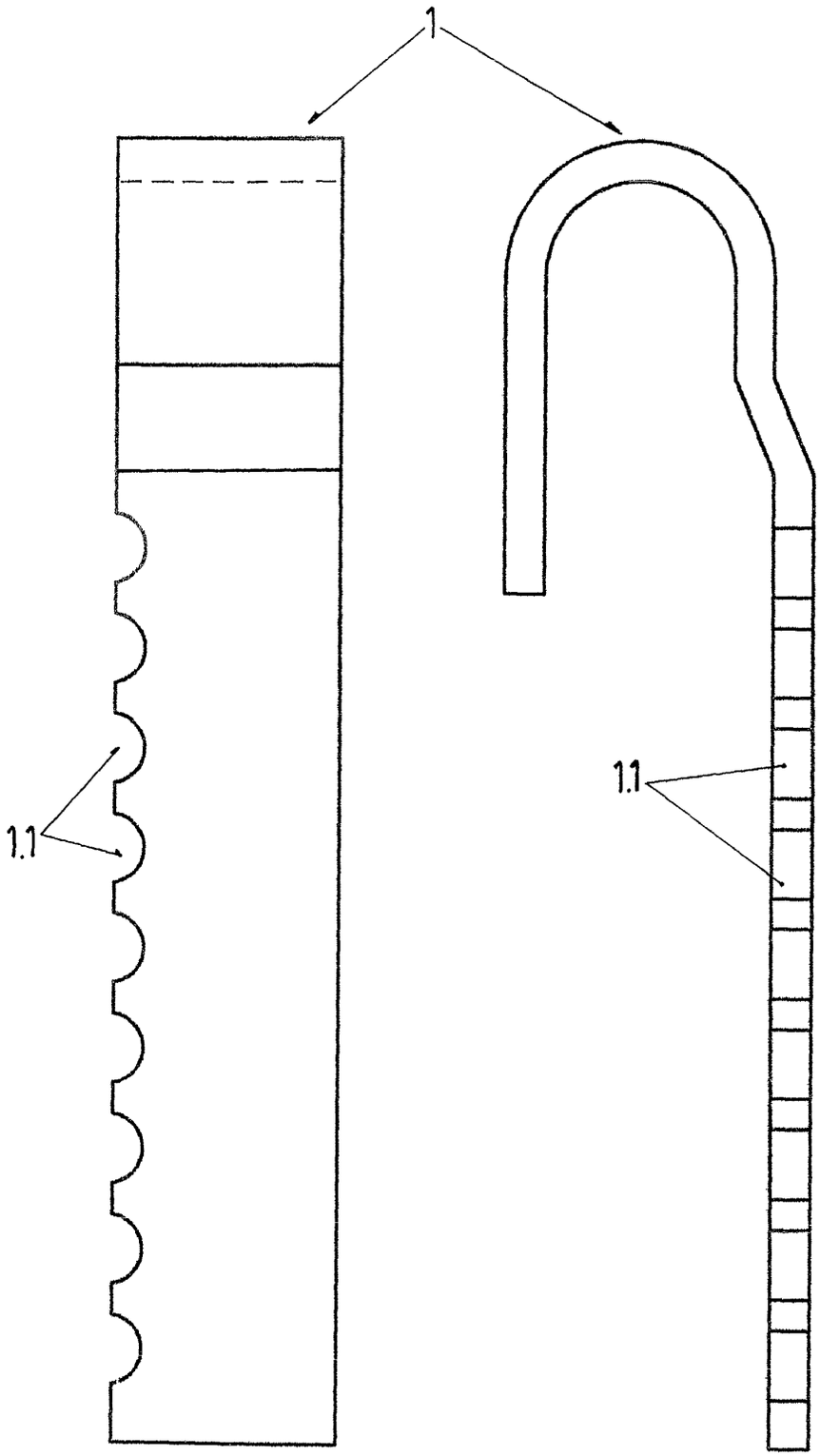

FIG.1

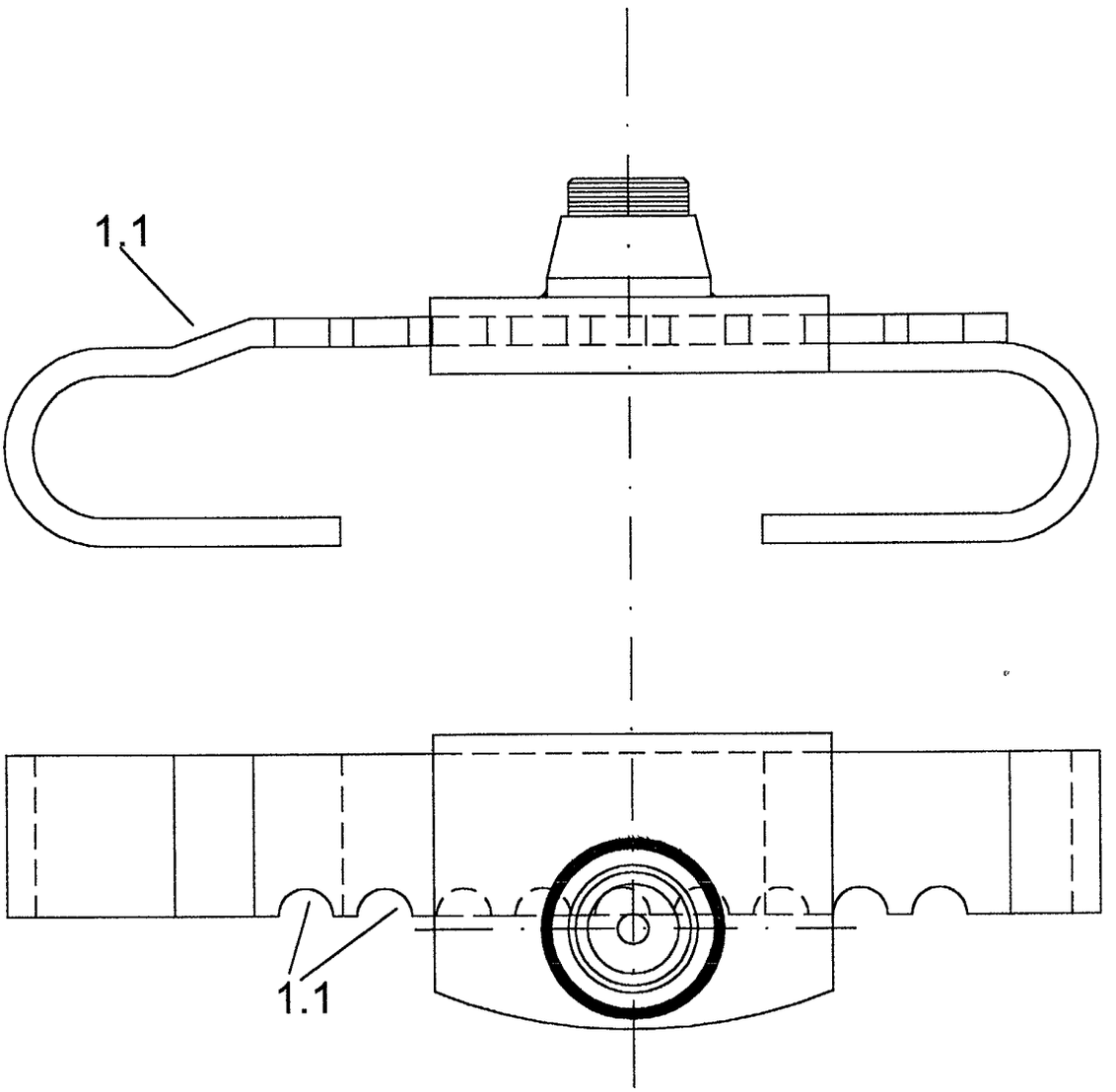

FIG.2

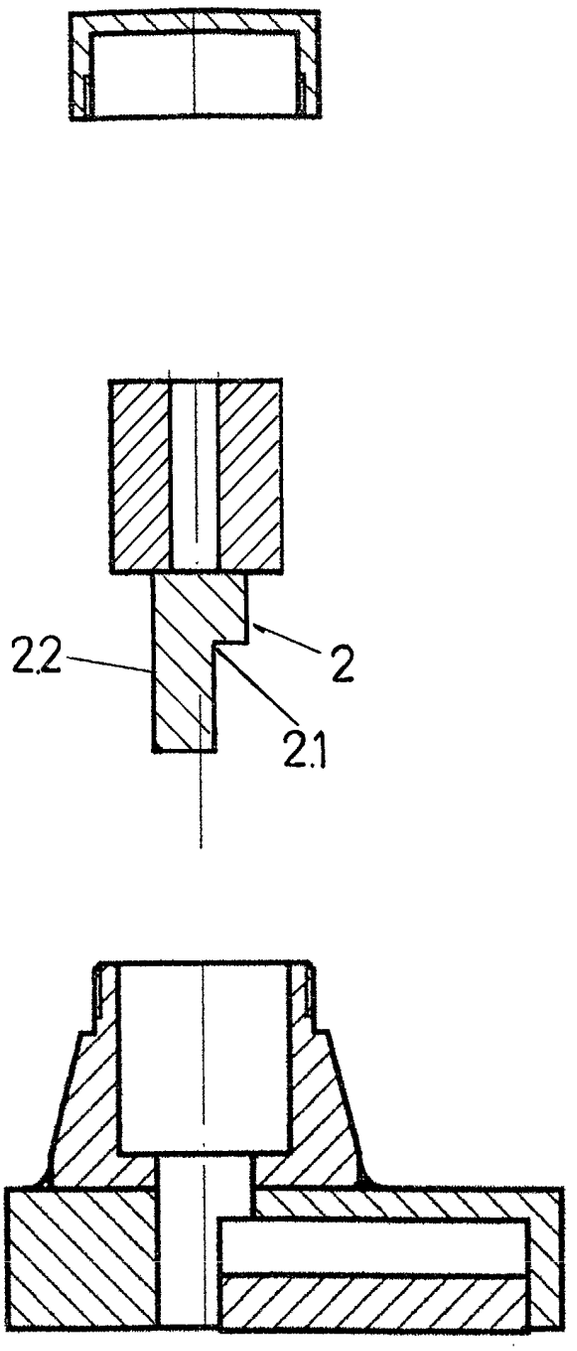

FIG.3

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EUROPEAN SEARCH REPORT

Application Number
EP 02 38 0066

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	GB 1 554 593 A (AGUADO) 24 October 1979 (1979-10-24) * the whole document *	1	E05C19/18 E05B65/14
X	US 6 116 065 A (HALE) 12 September 2000 (2000-09-12) * column 5, line 40 - column 6, line 33; figures 3-6 *	1	
X	US 6 212 920 B1 (WINNER) 10 April 2001 (2001-04-10) * column 6, line 22 - line 55; figures 7,8 *	1	
A	FR 2 698 904 A (SECURTIR (S.A.)) 10 June 1994 (1994-06-10) * the whole document *	1	

TECHNICAL FIELDS SEARCHED (Int.Cl.7)

E05C
B60R
E05B

The present search report has been drawn up for all claims

Place of search	Date of completion of the search	Examiner
THE HAGUE	1 October 2002	Westin, K

CATEGORY OF CITED DOCUMENTS

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ANNEX TO THE EUROPEAN SEARCH REPORT ON EUROPEAN PATENT APPLICATION NO. EP 02 38 0066

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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01-10-2002

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