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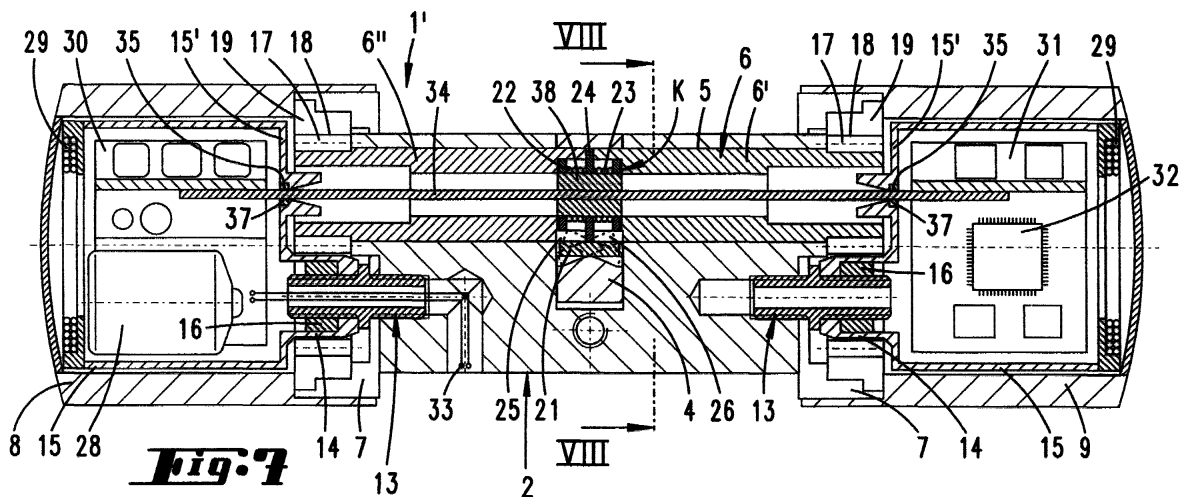
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(54) **Lock cylinder**

(57) The invention relates to a lock cylinder (1) having a lock member (4) and a lock member driving shaft (6) which is operable by a turning knob (8,9) via a gear-wheel transmission gear which comprises a pinion (17)

located on the driving shaft (6), which meshes with an internal toothing (18) of the turning knob (8,9). The axis of rotation of the turning knob (8,9) lies parallel and offset with respect to the axis of rotation of the driving shaft (6).





European Patent Office

PARTIAL EUROPEAN SEARCH REPORT

Application Number

which under Rule 45 of the European Patent Convention shall be considered, for the purposes of subsequent proceedings, as the European search report

EP 99 30 4314

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.6)
X	WO 96 07807 A (YALE SECURITY PROD LTD ;ASTON WALTER JOHN (GB)) 14 March 1996 (1996-03-14) * page 11, line 8 - line 26; figures 6,7 * ---	1-4	E05B53/00 E05B3/00 E05B9/04 E05B47/00 E05B47/06 E05B9/10
X	US 5 010 749 A (LIN JUI C) 30 April 1991 (1991-04-30) * the whole document * ---	1-4	
X	US 3 748 878 A (BALZANO A ET AL) 31 July 1973 (1973-07-31) * the whole document * ---	1,2,4	
X	GB 2 305 965 A (TAYLOR LOCK) 23 April 1997 (1997-04-23) * the whole document * ---	9	
A		11,12	
A	DE 196 12 156 A (LERCHNER LEONHARD ;HAINZLMAIER HERMANN (DE)) 2 October 1997 (1997-10-02) * column 5, line 34 - line 64; figure 3 * -----	14	
			TECHNICAL FIELDS SEARCHED (Int.Cl.6)
			E05B
INCOMPLETE SEARCH			
<p>The Search Division considers that the present application, or one or more of its claims, does/do not comply with the EPC to such an extent that a meaningful search into the state of the art cannot be carried out, or can only be carried out partially, for these claims.</p> <p>Claims searched completely :</p> <p>Claims searched incompletely :</p> <p>Claims not searched :</p> <p>Reason for the limitation of the search: see sheet C</p>			
Place of search		Date of completion of the search	Examiner
THE HAGUE		20 August 2002	Pieracci, A
CATEGORY OF CITED DOCUMENTS		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	
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			

EPO FORM 1503 03 82 (P04C07)



Claim(s) searched completely:

1,9

Claim(s) searched incompletely:

2-8,10-14 (searched only in their dependent form)

Reason for the limitation of the search:

Due to the expression "or in particular according to claim 1" in claim 2 and to the expression "or in particular according thereto" in claims 3-14, the claims 2-14 are to be regarded both as independent and dependent claims. Each of the claims 2-8 and 10-14 refers back to features of a previous claim (consider e.g. "...the driving shaft (6)..." in Claim 2 and "...a lock member driving shaft..." in Claim 1). The combination of features of Claim 2 in its independent form is consequently not defined and a meaningful search of the independent form of Claim 2 is not possible. The same reasoning applies to Claims 3-8 and 10-14.

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

EP 99 30 4314

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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20-08-2002

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
WO 9607807	A	14-03-1996	AU 3394695 A	27-03-1996
			CA 2198698 A1	14-03-1996
			DE 69517037 D1	21-06-2000
			DE 69517037 T2	11-01-2001
			EP 0777806 A1	11-06-1997
			ES 2148548 T3	16-10-2000
			WO 9607807 A1	14-03-1996
			US 5839305 A	24-11-1998
			ZA 9507364 A	17-04-1996
US 5010749	A	30-04-1991	NONE	
US 3748878	A	31-07-1973	NONE	
GB 2305965	A	23-04-1997	NONE	
DE 19612156	A	02-10-1997	DE 19612156 A1	02-10-1997