(11) **EP 2 458 115 A3**

(12)

EUROPEAN PATENT APPLICATION

(88) Date of publication A3: 09.03.2016 Bulletin 2016/10

(51) Int Cl.: **E05B** 19/02 (2006.01)

E05B 21/06 (2006.01)

(43) Date of publication A2: 30.05.2012 Bulletin 2012/22

(21) Application number: 11009210.3

(22) Date of filing: 21.11.2011

(84) Designated Contracting States:

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR Designated Extension States:

BA ME

(30) Priority: **30.11.2010 CZ 20100880**

(27) Previously filed application: **30.11.2010 CZ 20100880**

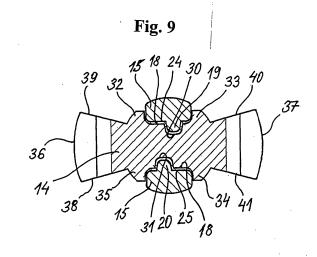
(71) Applicant: Tokoz A.S. 59102 Zdar nad Sazavou (CZ)

(72) Inventors:

- Sobotka, David 59102 (CZ)
- Dvorak, Lubos
 59444 Radostin nad Oslavou (CZ)
- (74) Representative: Zemanová, Veronika Kania, Sedlak, Smola Patent Attorneys Mendlovo namesti 1 a 603 00 Brno (CZ)

(54) Coding mechanism for cylinder lock with a rotatable key and key blank

(57)A coding mechanism for a cylinder lock with a rotatable key consists of a guiding element (13) for aligning the shank (14) of the rotatable key (12) inside the cylinder lock and of the rotatable key (12) itself, wherein the guiding element (13) comprises two mutually parallel and spaced apart guide rails (15), which have their ends interconnected by an abutment bridge (16) and which are provided with guiding surfaces (18) extending along their entire lengths, the shank (14) of the rotatable key (12) being provided with usual coding projections (21) adapted for interaction with usual catchers arranged inside the respective cylinder lock and having its entire cross-section continuously increasing from its intermediate portion towards at least one of its longitudinal edges (36, 37), at least one of the two pairs of the functional surfaces (38, 39 and 40, 41) of said shank having an open V-shape and the intermediate portion of the cross-section of the same being provided with a pair of corresponding longitudinal notches (22, 23). The longitudinal notches (22, 23) have flat bottom portions (24, 25), the guiding surface (18) of at least one guide rail (15) and the corresponding flat bottom portion (24, 25) of the respective longitudinal notch (22, 23) formed in the shank (14) of the rotatable key (12) having their shapes adapted for generating a locking code of the cylinder lock.



P 2 458 115 A3



EUROPEAN SEARCH REPORT

Application Number EP 11 00 9210

5

		DOCUMENTS CONSID				
	Category	Citation of document with in	ERED TO BE RELEVANT adication, where appropriate,	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)	
10	X,D	of relevant passa EP 0 989 262 A2 (AB 29 March 2000 (2000 * column 13, line 1 12 *	LOY OY [FI])	1-5	INV. E05B19/02 E05B21/06	
15	x	US 3 597 948 A (JOH 10 August 1971 (197 * the whole documen	1-08-10)	1-5		
20	X	GB 2 173 852 A (WAE 22 October 1986 (19 * page 4, line 37 -		1		
		* page 5, line 120	- page 6, line 30 *			
25	A	US 4 320 638 A (DUN 23 March 1982 (1982 * figures 11-16 *	PHY GERALD F ET AL) -03-23)	1,2,4		
30	A	US 1 438 336 A (WIL FREDERICK) 12 Decem * figures 1-7 *	LIAM SCHROEDER ber 1922 (1922-12-12)	1,3,5	TECHNICAL FIELDS SEARCHED (IPC)	
35					E05B	
40						
45		The present search report has b	peen drawn up for all claims			
1		Place of search	Date of completion of the search		Examiner	
50		The Hague	27 January 2016	Rob	elin, Fabrice	
50 (100404) 28 80 80 80 1 MHO 4 O G	X: part Y: part doct	ATEGORY OF CITED DOCUMENTS icularly relevant if taken alone icularly relevant if combined with another and the same category proportied background	L : document cited fo	ument, but publise the application rother reasons	shed on, or	
55				e same patent family, corresponding		

2

EP 2 458 115 A3

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

EP 11 00 9210

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 The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

27-01-2016

C	Patent document ited in search report		Publication date		Patent family member(s)		Publication date
E	P 0989262	A2	29-03-2000	AR AT AU BRA CON CZEE E F H H I D L L P Y O N Z E E E F K U U L L P Y O N Z E L T W A S A T U U S A	748186 9905208 2281245 1249386 9903385 69914429	T B2 A A1 A A A A A A A A A A A A A A A A A	15-05-2002 15-02-2004 30-05-2002 29-08-2000 25-03-2000 05-04-2000 14-06-2004 02-12-2004 01-06-2004 24-04-2000 15-06-2000 29-03-2000 29-03-2000 29-04-2005 28-05-2001 16-11-2000 01-12-2002 04-04-2000 31-01-2007 27-03-2000 27-03-2000 27-03-2000 27-03-2000 21-04-2000 21-04-2000 21-04-2000 21-04-2000 21-04-2000 21-04-2000 21-04-2000 21-04-2000 21-04-2000 21-04-2000 21-04-2000 21-04-2000 21-04-2000 21-04-2000
U -	 S 3597948	Α	10-08-1971	NONE			
G	B 2173852	Α	22-10-1986	DE FI GB SE US	3612242 851441 2173852 461802 4686843	A A B	30-10-1986 12-10-1986 22-10-1986 26-03-1990 18-08-1987
	S 4320638	Α	23-03-1982	NZ US	193664 4320638		30-09-1983 23-03-1982
FORM P0459	S 1438336	A	12-12-1922	NONE			

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

EP 2 458 115 A3

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

EP 11 00 9210

5

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 The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

27-01-2016

10	Patent document cited in search report	Publication date	Patent family member(s)	Publication date
15				
20				
25				
30				
25				
35				
40				
45				
50	9			
	Solution of the state of the st			
55	For more details about this annex : see C	Official Journal of the Europ	ean Patent Office, No. 12/82	