



(12) **EUROPEAN PATENT APPLICATION**

(88) Date of publication A3:
05.11.2014 Bulletin 2014/45

(51) Int Cl.:
E05B 65/20^(0000.00)

(43) Date of publication A2:
28.10.2009 Bulletin 2009/44

(21) Application number: **09004613.7**

(22) Date of filing: **30.03.2009**

(84) Designated Contracting States:
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 SE SI SK TR
Designated Extension States:
AL BA RS

(72) Inventors:
• **Ishiguro, Katsuyuki**
Yokohama-shi
Kanagawa-ken (JP)
• **Sakagami, Hiroyuki**
Yokohama-shi
Kanagawa-ken (JP)

(30) Priority: **23.04.2008 JP 2008112242**

(71) Applicant: **Mitsui Kinzoku ACT Corporation**
Naka-ku
Yokohama-shi
Kanagawa (JP)

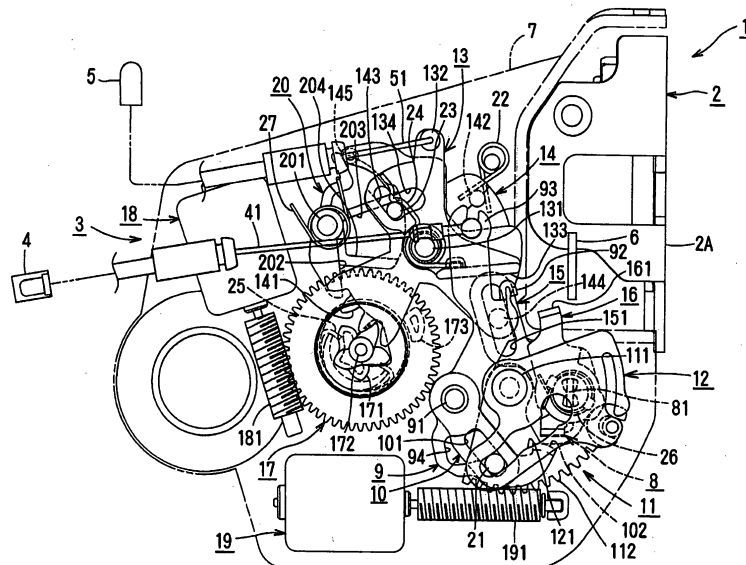
(74) Representative: **Grünecker, Kinkeldey, Stockmair & Schwanhäusser**
Leopoldstrasse 4
80802 München (DE)

(54) **Vehicle door latch apparatus**

(57) When first and second locking lever are in locking positions, a double locking control pin is caused to move to a disconnecting position via a double locking switching lever through rotation of a worm wheel from a neutral position in a locking direction. When the double locking control pin is in the disconnecting position, the

double locking control pin is caused to move to a connecting position via the double locking switching lever through rotation of the worm wheel from the neutral position in an unlocking direction and the first and second locking levers are also caused to move to unlocking positions.

FIG. 1





EUROPEAN SEARCH REPORT

Application Number
EP 09 00 4613

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
A	US 2002/171250 A1 (KOBAYASHI FUMIO [JP] ET AL) 21 November 2002 (2002-11-21) * the whole document *	1	INV. E05B65/20
A	DE 10 2005 052190 A1 (KIEKERT AG [DE]) 3 May 2007 (2007-05-03) * the whole document *	1	
A	EP 1 035 281 A1 (ATOMA ROLTRA SPA [IT] INTIER AUTOMOTIVE CLOSURES SPA [IT]) 13 September 2000 (2000-09-13) * the whole document *	1	
			TECHNICAL FIELDS SEARCHED (IPC)
			E05B
The present search report has been drawn up for all claims			
Place of search Berlin		Date of completion of the search 23 September 2014	Examiner Standing, Michael
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			

EPO FORM 1503 03.02 (P04C01)

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

EP 09 00 4613

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.

23-09-2014

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 2002171250 A1	21-11-2002	FR 2824862 A1	22-11-2002
		JP 4132723 B2	13-08-2008
		JP 2002339625 A	27-11-2002
		US 2002171250 A1	21-11-2002

DE 102005052190 A1	03-05-2007	NONE	

EP 1035281 A1	13-09-2000	BR 0002050 A	31-10-2000
		DE 60010781 D1	24-06-2004
		DE 60010781 T2	16-06-2005
		EP 1035281 A1	13-09-2000
		ES 2220276 T3	16-12-2004
		IT T0990192 A1	12-09-2000
		PL 338875 A1	25-09-2000

EPO FORM P0459

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