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(54) Title: ELECTRONIC DOOR LOCK ASSEMBLY PRELOAD COMPENSATION SYSTEM

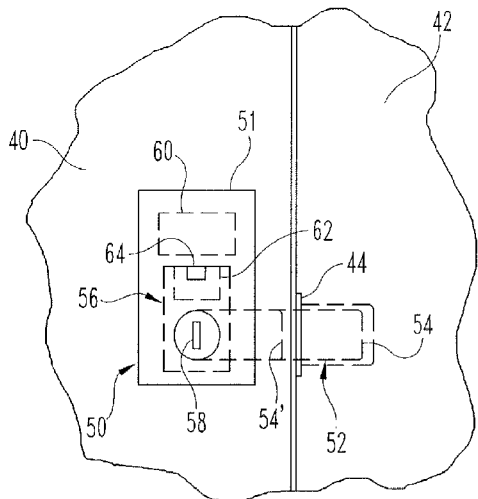


Fig. 1

(57) Abstract: Disclosed are various embodiments of lock devices, systems, and methods. A locking system includes a locking mechanism with a controller configured to provide an actuation signal to an electronic actuator to extend or retract a locking mechanism and to adjust an allowable peak current for operating the electronic actuator to throw the deadbolt based on whether the allowable peak current is sufficient for the locking mechanism to achieve its locked or unlocked positions. The allowable peak current can be adjusted over time between a minimum and maximum peak current, thus optimizing the actual current draw from the electronic actuator required to throw the locking mechanism and minimizing power consumption.



INTERNATIONAL SEARCH REPORT

International application No.
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<p>A. CLASSIFICATION OF SUBJECT MATTER IPC(8) - E05B 47/00 (2013.01) USPC - 70/263 According to International Patent Classification (IPC) or to both national classification and IPC</p>																													
<p>B. FIELDS SEARCHED</p> <p>Minimum documentation searched (classification system followed by classification symbols) IPC(8) - E05B 47/00, 06; H01H 47/22 (2013.01) USPC - 70/262-265, 267, 271, 275, 277, 278.1, 278.2, 278.3, 280-282; 292/144, 201, 341.15, 341.16; 361/170, 179, 187, 679.57, 679.58</p> <p>Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched CPC - E05B 47/02, 023, 026, 06 (2013.01)</p> <p>Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) PatBase, Google Patents, Google</p>																													
<p>C. DOCUMENTS CONSIDERED TO BE RELEVANT</p> <table border="1"> <thead> <tr> <th>Category*</th> <th>Citation of document, with indication, where appropriate, of the relevant passages</th> <th>Relevant to claim No.</th> </tr> </thead> <tbody> <tr> <td>Y</td> <td>US 2008/0223093 A1 (AMIR) 18 September 2008 (18.09.2008) entire document</td> <td>1-20</td> </tr> <tr> <td>Y</td> <td>WO 95/25327 A1 (GOMEZ) 21 September 1995 (21.09.1995) entire document</td> <td>1-7, 10, 11, 15-20</td> </tr> <tr> <td>Y</td> <td>US 2012/0167646 A1 (SHARMA et al) 05 July 2012 (05.07.2012) entire document</td> <td>8-14</td> </tr> <tr> <td>Y</td> <td>US 2011/0080685 A1 (WELLNER et al) 07 April 2011 (07.04.2011) entire document</td> <td>16</td> </tr> <tr> <td>A</td> <td>US 4,727,301 A (FULKS et al) 23 February 1988 (23.02.1988) entire document</td> <td>1-20</td> </tr> <tr> <td>A</td> <td>US 2010/0127517 A1 (BLIDING et al) 27 May 2010 (27.05.2010) entire document</td> <td>1-20</td> </tr> <tr> <td>A</td> <td>US 4,744,021 A (KRISTY) 10 May 1988 (10.05.1988) entire document</td> <td>1-20</td> </tr> <tr> <td>A</td> <td>US 2010/0032969 A1 (BLANCH) 11 February 2010 (11.02.2010) entire document</td> <td>1-20</td> </tr> </tbody> </table>			Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.	Y	US 2008/0223093 A1 (AMIR) 18 September 2008 (18.09.2008) entire document	1-20	Y	WO 95/25327 A1 (GOMEZ) 21 September 1995 (21.09.1995) entire document	1-7, 10, 11, 15-20	Y	US 2012/0167646 A1 (SHARMA et al) 05 July 2012 (05.07.2012) entire document	8-14	Y	US 2011/0080685 A1 (WELLNER et al) 07 April 2011 (07.04.2011) entire document	16	A	US 4,727,301 A (FULKS et al) 23 February 1988 (23.02.1988) entire document	1-20	A	US 2010/0127517 A1 (BLIDING et al) 27 May 2010 (27.05.2010) entire document	1-20	A	US 4,744,021 A (KRISTY) 10 May 1988 (10.05.1988) entire document	1-20	A	US 2010/0032969 A1 (BLANCH) 11 February 2010 (11.02.2010) entire document	1-20
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<p>Date of the actual completion of the international search 06 December 2013</p>		<p>Date of mailing of the international search report 16 DEC 2013</p>																											
<p>Name and mailing address of the ISA/US Mail Stop PCT, Attn: ISA/US, Commissioner for Patents P.O. Box 1450, Alexandria, Virginia 22313-1450 Facsimile No. 571-273-3201</p>		<p>Authorized officer: Blaine R. Copenheaver PCT Helpdesk: 571-272-4300 PCT OSP: 571-272-7774</p>																											