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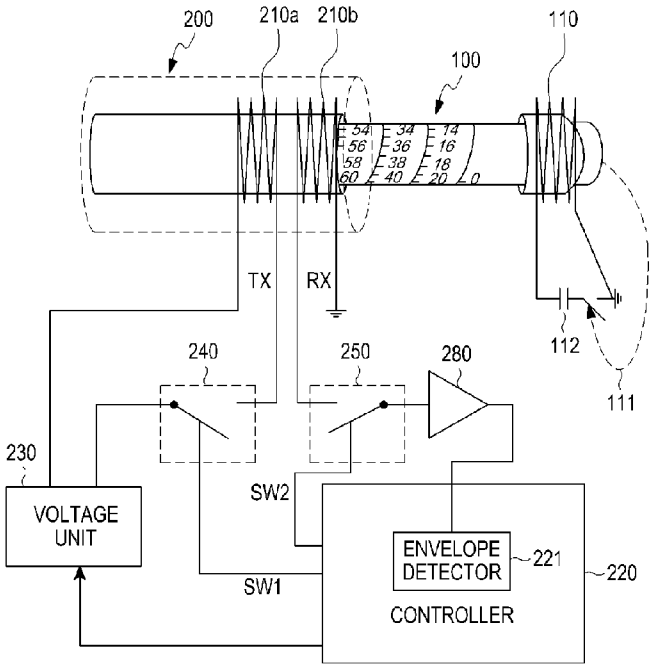
[Continued on next page]

(54) **Title**: INJECTOR AND DEVICE FOR DETECTING INJECTION BUTTON



(57) **Abstract**: An injector includes an injection button; and a coil for radiating energy that informs an injection button detection device combined with the injector, of an input of the injection button. The injection button detection device includes a transmitter for radiating an electromagnetic wave associated with a specific voltage to radiate energy that informs an injector combined with the injection button detection device, of an input of an injection button; a receiver for receiving a voltage based on energy radiated from the injector; and a controller for detecting an input of the injection button based on the voltage received from the receiver.

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A. CLASSIFICATION OF SUBJECT MATTER

A61M 5/31(2006.01)i, A61M 5/315(2006.01)i, G01R 19/165(2006.01)i

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

A61M 5/31; A61M 37/00; A61M 1/00; A61M 5/315; B67D 5/30

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Korean utility models and applications for utility models

Japanese utility models and applications for utility models

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

eKOMPASS(KIPO internal) & Keywords: insulin injector, button, detect, electromagnetic field, coil, resonant, capacitor, switch.

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 2008-0169307 A1 (HOFSTETTER, MICHAEL) 17 July 2008	1
A	See paragraphs [0007] and [0032]-[0034]; claims 1, 7, and 17; and figures 1-3.	2-16
A	US 2007-0066938 A1 (IIO, TOSHIAKI et al.) 22 March 2007 See paragraphs [0111], [0114]-[0116], [0159]-[0170], [0189], and [0196]; claims 12 and 18; and figures 3-4 and 10-11.	1-16
A	US 2004-0210199 A1 (ATTERBURY, WILLIAM GOODWIN et al.) 21 October 2004 See paragraphs [0079], [0096], [0143]-[0145], and [0152]-[0154]; claims 23-28 and 43; and figures 1, 12-13, and 19-21.	1-16
A	US 6,752,787 B1 (CAUSEY, III, JAMES D. et al.) 22 June 2004 See col. 10, lines 2-11; col. 11, lines 12-25 and 58-61; claims 1 and 9; and figures 20-21.	1-16

☐ Further documents are listed in the continuation of Box C.

☒ See patent family annex.

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"&" document member of the same patent family

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Information on patent family members

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