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(54) Title: RAPIDLY DECOUPLING MECHANICAL CONNECTOR

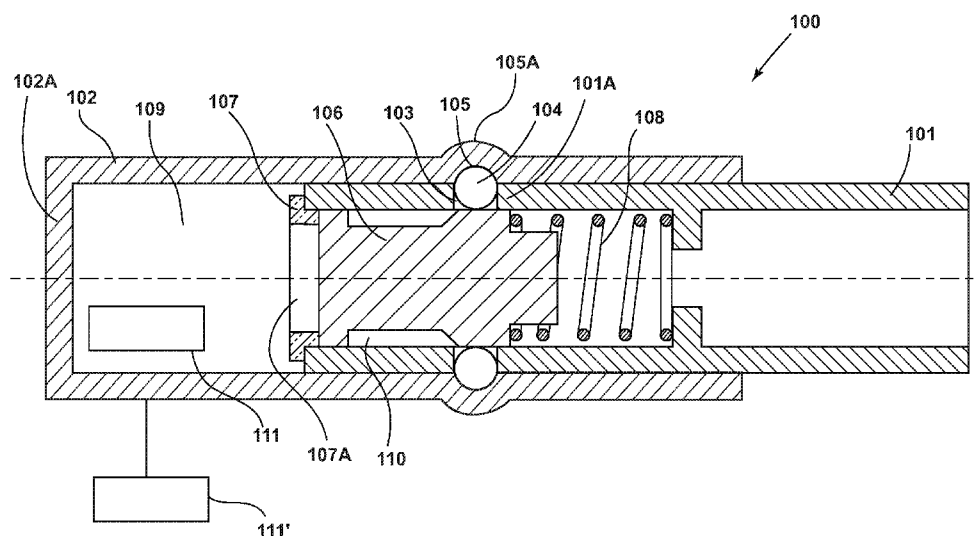


FIG. 1

(57) Abstract: A mechanical connector includes a first component, a second component connected with the first component, one or more connecting elements disposed at least partially in one or more apertures of the first component, and a piston disposed in the first component. The piston may control movement of the connecting elements to selectively restrict relative movement of the first and second components. In a first position, the piston may retain the connecting elements such that each connecting element may be disposed at least partially in the first and second components to restrict relative movement between the first component and the second component. In a second piston position, the connecting elements may be disposed at least partially in a recess of the piston and in the first component, so as not to be sufficiently engaged with the second component to prevent relative movement of the first and second components.



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A. CLASSIFICATION OF SUBJECT MATTER
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B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

See Search History document

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

See Search History document

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

See Search History document

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X ----- Y	DE 20 2012 011 691 U1 (SPICKERMAN M) 16 January 2014; paragraphs [0036]-[0040], figures 1-5	1-3, 9, 12-16 ----- 2, 20
X ----- Y	US 3,053,559 A (FRICK, N) 11 September 1962; figures 1-5, column 2, lines 1-11, 63-72, column 3, line 1	1, 13-14, 17-19 ----- 2, 20
A	CA 2 985 250 A1 (ALFA GOMMA SPA) 10 November 2016; figures 1-2	4
P, X	US 2018/0087699 A1 (STAUBLI FAVERGES) 29 March 2018; figures 1-8, paragraphs [0008]-[0020]	1, 13-15

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