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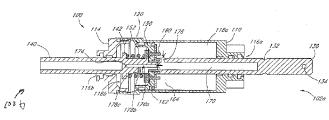


FIG. 1A

(57) Abstract: A snubber valve (100) provides velocity- and/or position-dependent mechanical snubbing. The snubber (100) comprises pressure sensing pins (160) controlling the position of a float (150) that changes the cross section of a fluid flow channel (170) in the valve (100). In some embodiments, the pins (160) sense their position in the valve (100), controlling the position of a float (150) that changes the cross section of a fluid flow channel (170) in the valve (100). Also provided are methods for snubbing, for example, an aircraft door.





INTERNATIONAL SEARCH REPORT

International application No.

PCT/US 08/85578

A. CLASSIFICATION OF SUBJECT MATTER IPC(8) - F16K 47/00 (2009.01) USPC - 251/120 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)			
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Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched USPC - 16/56, 57, 58, 61, 67, 71, 78, 79, 82, 84; 91/4A, 25, 384, 403, 405, 406, 408, 409, 459, 464;92/12, 143; 137/15.26, 41, 436, 493, 493.1, 625.64;188.11, 134, 198.30, 291.1, 312, 313, 316, 317, 322.22, 378; 248/569, 562;251/12, 47, 58, 61.2, 118, 120, 121, 136;			
Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) freepatentsonline.com, google.com, PubWEST			
C. DOCUMENTS CONSIDERED TO BE RELEVANT			
Category*	Citation of document, with indication, where ap	propriate, of the relevant passages	Relevant to claim No.
Υ	US 5,687,452 A (Hamatani et al.) 18 November 1997 (18.11.1997) entire document , esp. Fig 2, col 2 ln 65 - col 3 ln 2, col 8 ln 65 - col 9 ln 29.		1-12, 19-20
Υ	US 2006/0226587 A1 (Sendrea) 12 October 2006 (12.10.2006), entire document, esp. Fig 2, 3.		1-12
Y	US 5,546,847 A (Rector et al.) 20 August 1996 (20.08.1996), entire document, esp. col 4 ln 43-46, Fig 2.		2-5
Y	US 2006/0027954 A1 (Nesbitt et al.), 9 February 2006 (09.02.2006), entire document, esp. Fig 1A, 3B, 6A,8, para [0013].		7, 10-11, 17-18
Υ	US 3,442,501 A (Soderberg) 6 May, 1969 (06.05.1969), entire document, esp. Fig 1.		9
x	US 6,382,370 B1 (Girvin) 7 May 2002 (07.05.2002), entire document esp. Fig 3-6, col 3 in 21 -		13, 14, 16,
Y	col 4 in 3.		9, 15, 17 - 20
Y	US 6,763,920 B2 (Finley) 20 July 2004 (20.07.2004), entire document, esp. Fig 1, col 4 In 1-20.		15
Y	US 2,571,279 A (Myklestad) 16 October 1951 (16.10.1951), enitre document, esp. Fig 1-3, col 1 In 23-25, col 2 In 50-70.		12
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