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(54) Title: PRESSURE ACTIVATED REMOTE MICROPHONE

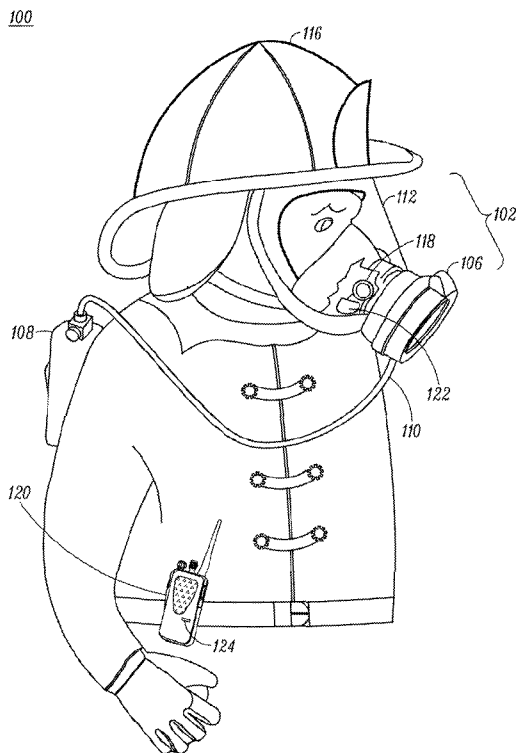


FIG. 1

(57) Abstract: A pressure activated remote microphone is provided within a communication system (100). A face mask (102) incorporates a remote microphone (118) and one or more pressure sensor(s) (122). When a user puts on the mask (102), the remote microphone (118) is enabled in response to the pressure sensed by the pressure sensors (122). When the mask (102) is removed, the remote microphone (118) is disabled in response to the change in pressure sensed by the pressure sensor(s) (122).

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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)

H04R 1/08; B63C 11/12; H04M 1/60; H04B 7/00; A62B 7/00; H04R 3/00; A62B 18/08; H04B 1/04; H04B 11/00; A61M 16/00

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: 'mask','microphone','pressure','sensor','communication','radio'

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 2007-0283952 A1 (MARK WILBUR) 13 December 2007	1-5
Y	See the abstract, figs 1 to 3, 5, claims 10, 13, 15, 19, 20.	6-19
Y	JP 2008-505538 A (William Kushner, Sara Harton, Mark Jasiuk) 21 February 2008 See the abstract, figs 1, 2, [004]~[005]	6-19
A	US 4827964 A (GUIDO; MICHAEL R. et al.) 09 May 1989 See the abstract, figs 1, 4, claim 1.	1-20
A	US 5586176 A (PECK; JEROME) 17 December 1996 See the abstract, figs 1, 2, 4, claims 1, 17.	1-20
A	KR 10-2003-0073015 A (OH, CHEON SUCK) 19 September 2003 See the abstract, fig 2, claim 1.	1-20
A	US 2006-0286933 A1 (Consort LLC) 21 December 2006 See the abstract, figs 1, 2, claims 1, 27, 36.	1-20

 Further documents are listed in the continuation of Box C. See patent family annex.

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"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&" document member of the same patent family

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Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 2007-0283952 A1	13.12.2007	None	
JP 2008-505538 A	21.02.2008	AU 2005-262623 A1 AU 2005-262623 B2 CA 2572715 A1 CN 101010731 A CN 101010731 C0 EP 1769493 A2 EP 1769493 A4 EP 1769493 B1 JP 04468447 B2 US 07254535 B2 US 2006-0020451 A1 WO 2006-007290 A2 WO 2006-007290 A3	19.01.2006 03.07.2008 19.01.2006 01.08.2007 01.08.2007 04.04.2007 22.08.2007 13.08.2008 05.03.2010 07.08.2007 26.01.2006 19.01.2006 19.01.2006
US 4827964 A	09.05.1989	EP 0288903 A2 EP 0288903 A3 EP 0288903 B1	02.11.1988 20.12.1989 26.05.1993
US 5586176 A	17.12.1996	US 5793855 A1 US 5926532 A1	11.08.1998 20.07.1999
KR 10-2003-0073015 A	19.09.2003	None	
US 2006-0286933 A1	21.12.2006	US 07342502 B2	11.03.2008