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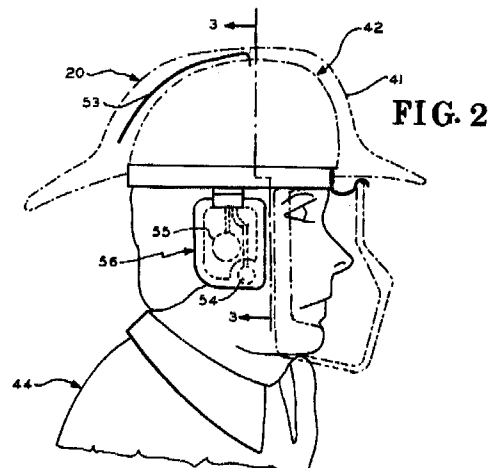
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Combination head-protective helmet & communications system.

A combination head-protective helmet (20) and voice communication system (22, 22A, 22B) which provides generally a hands-free voice communication between a wearer of the helmet (10, 11, 12, 14) and another person, which comprises a combination head-protective helmet (20) and protective member (106, 200, 300) extending downwardly for covering and protecting at least the ears of the wearer of the helmet from heat and flame, and a transceiver (52) for transmitting and receiving voice communication. The transceiver includes interconnected transceiver circuitry (52A, 52B), a speaker (55, 55A, 55C), a microphone (54, 54A), and an antenna (53, 53A). The transceiver circuitry (52A, 52B) and the speaker (55, 55A, 55C) are mounted on the protective member (106, 200, 300) and the speaker is mounted on the protective member in a position to transmit voice communication to the wearer of the helmet, with the microphone (54, 54A) mounted on the combination head-protective helmet and protective member in a

position to receive voice communication from the wearer of the helmet and the antenna resides within the helmet.



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DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int. Cl.5)
X Y A	PATENT ABSTRACTS OF JAPAN vol. 12, no. 335 (E-656)9 September 1988 & JP-A-63 097 088 (MEISEI) 27 April 1988 * abstract * ---	1 2,3,6,7 4,5, 8-11,13, 15	H04R1/10 H04R1/46 A42B3/30 A62B18/08
X Y A	PATENT ABSTRACTS OF JAPAN vol. 11, no. 152 (E-507)16 May 1987 & JP-A-61 288 525 (SANSHIN) 18 December 1986 * abstract * ---	1 2,3,6,7 4,5, 8-11,13, 15	
Y A	EP-A-0 019 838 (A. PELKER) * page 1, line 1-3 * * page 2, line 19 - page 3, line 13 * * page 4, line 16 - page 7, line 20 * ---	2,3,6 1,4,5	TECHNICAL FIELDS SEARCHED (Int. Cl.5)
Y A	US-A-4 184 212 (BOWMAN) * column 1, line 5-9 * * column 2, line 36 - column 4, line 9 * ---	7 8-10	H04R H04B H04Q A62B H04K
A	FR-A-2 261 682 (PARCELLIER ET AL.) * page 2, line 11 - line 24 * * page 3, line 20 - page 5, line 32 * ---	1,4,5,8	
A	PATENT ABSTRACTS OF JAPAN vol. 14, no. 114 (E-897)28 February 1990 & JP-A-13 11 730 (NGK INSULATORS) 15 December 1989 * abstract * ----- -/--	11,13, 15,17	
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 22 OCTOBER 1992	Examiner ZANTI P.V.L.
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document		T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons ----- & : member of the same patent family, corresponding document	



DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int. Cl.5)
A	DE-A-2 839 582 (LICENTIA PATENT) * page 4, line 13 - page 5, line 17 * -----	11-18	
			TECHNICAL FIELDS SEARCHED (Int. Cl.5)
The present search report has been drawn up for all claims			
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