



(12) **EUROPEAN PATENT APPLICATION**

(88) Date of publication A3:  
**12.11.2003 Bulletin 2003/46**

(51) Int Cl.7: **A42B 3/10**

(43) Date of publication A2:  
**05.06.2002 Bulletin 2002/23**

(21) Application number: **01310145.6**

(22) Date of filing: **04.12.2001**

(84) Designated Contracting States:  
**AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU  
MC NL PT SE TR**  
Designated Extension States:  
**AL LT LV MK RO SI**

(72) Inventors:  
• **Epperson, William Lewis**  
**Clarks Summit, Pennsylvania 18411 (US)**  
• **Nattress, Robert Henry**  
**Shavertown, Pennsylvania 18708 (US)**  
• **Kuna, Francis J.**  
**Carbondale, Pennsylvania 18407 (US)**

(30) Priority: **04.12.2000 US 729119**

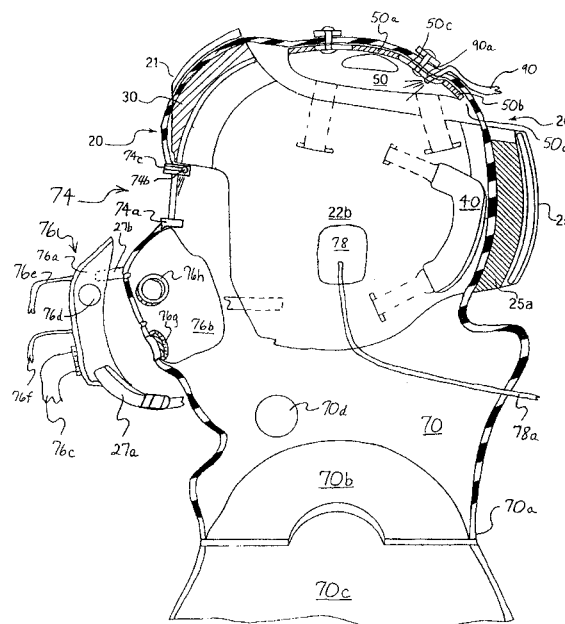
(71) Applicant: **GENTEX CORPORATION**  
**Carbondale Pennsylvania 18407 (US)**

(74) Representative: **Goodenough, Nigel et al**  
**A.A. Thornton & Co.**  
**235 High Holborn**  
**London WC1V 7LE (GB)**

(54) **Custom fitting assembly for helmet with protective hood**

(57) A protective system for aircrew comprises an outer helmet and an inner helmet (20). The inner helmet includes a protective hood (70) molded to the contours of the interior of an aircrew helmet. A brow pad (30) and a support panel (40, 50) are located within the protective hood (70). A custom fitting system, that adjusts the po-

sition of the support panel (40, 50) relative to the outer helmet, is located outside the hood. The custom fitting system is pivotally connected to the support panel (40, 50), with the protective hood (70) sealed around the pivotal connection. The brow pad (30) and support panel (40, 50) lift the hood off the wearer's head, providing a gap to circulate ventilating air.





European Patent  
Office

# EUROPEAN SEARCH REPORT

Application Number  
EP 01 31 0145

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.7)
D, A	US 5 584 073 A (GENTEX CORPORATION) 17 December 1996 (1996-12-17) * column 1, line 54 - column 2, line 6 * * column 3, line 34 - line 39 * * column 3, line 65 - column 4, line 11 * * column 4, line 34 - column 6, line 30 * * figures * ---	1-3,5	A42B3/10
A	WO 93 14818 A (INTERTECHNIQUE) 5 August 1993 (1993-08-05) ---		
A	US 5 245 993 A (THE BOEING COMPANY) 21 September 1993 (1993-09-21) ---		
A	US 4 833 735 A (GENTEX CORPORATION) 30 May 1989 (1989-05-30) ---		
A	US 5 315 718 A (THE UNITED STATES OF AMERICA, REPRESENTED BY THE SECRETARY OF THE ARMY) 31 May 1994 (1994-05-31) ---		
A	EP 0 468 675 A (HELMETS LIMITED) 29 January 1992 (1992-01-29) ---		TECHNICAL FIELDS SEARCHED (Int.Cl.7)
A	US 3 843 970 A (M. T. MARIETTA ET AL.) 29 October 1974 (1974-10-29) ---		A42B
P, A	GB 2 358 787 A (GENTEX CORPORATION) 8 August 2001 (2001-08-08) * the whole document * -----	1-5, 15-26	
The present search report has been drawn up for all claims			
Place of search <b>THE HAGUE</b>		Date of completion of the search <b>22 September 2003</b>	Examiner <b>Bourseau, A-M</b>
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	

EPO FORM 1503 03/82 (P04C01)

**ANNEX TO THE EUROPEAN SEARCH REPORT  
ON EUROPEAN PATENT APPLICATION NO.**

EP 01 31 0145

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on  
The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

22-09-2003

Patent document cited in search report		Publication date	Patent family member(s)		Publication date
US 5584073	A	17-12-1996	DE	19613454 A1	17-10-1996
			FR	2732865 A1	18-10-1996
			GB	2299744 A , B	16-10-1996
WO 9314818	A	05-08-1993	FR	2686795 A1	06-08-1993
			DE	69304629 D1	17-10-1996
			DE	69304629 T2	03-04-1997
			EP	0578808 A1	19-01-1994
			WO	9314818 A1	05-08-1993
			US	5653225 A	05-08-1997
US 5245993	A	21-09-1993	NONE		
US 4833735	A	30-05-1989	NONE		
US 5315718	A	31-05-1994	NONE		
EP 0468675	A	29-01-1992	EP	0468675 A1	29-01-1992
			US	5324460 A	28-06-1994
US 3843970	A	29-10-1974	NONE		
GB 2358787	A	08-08-2001	US	6279172 B1	28-08-2001
			FR	2804288 A1	03-08-2001
			US	2002073479 A1	20-06-2002