



INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification ⁶: F41H 1/02, A41D 31/00	A1	(11) International Publication Number: WO 99/04217 (43) International Publication Date: 28 January 1999 (28.01.99)
(21) International Application Number: PCT/US98/14471 (22) International Filing Date: 14 July 1998 (14.07.98) (30) Priority Data: 08/892,584 14 July 1997 (14.07.97) US (71) Applicant: E.I. DU PONT DE NEMOURS AND COMPANY [US/US]; 1007 Market Street, Wilmington, DE 19898 (US). (72) Inventors: MOUREAUX, Beatrice; La Poutre, F-39130 Bon- lieu (FR). PFISTER, Friedrich, V.; 3, chemin des Avettes, CH-1217 Meyrin (CH). VAN ZIJL, Nicolas, A.; 22, chemin François Lehmann, CH-1218 Le Grand Saconnex (CH). (74) Agent: SHAFER, Robert, J.; E.I. du Pont de Nemours and Company, Legal Patent Records Center, 1007 Market Street, Wilmington, DE 19898 (US).		(81) Designated States: AU, BG, BR, BY, CA, CN, CZ, HU, IL, JP, KR, MX, PL, RO, RU, SG, UA, European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE). Published <i>With international search report.</i> <i>With amended claims.</i>

(54) Title: SPECIALLY SHAPED MULTILAYER ARMOUR**(57) Abstract**

Armour, in particular body armour for female wearers is made of multiple layers (30) of penetration-resistant material for example made of polyaramid fibers, specially shaped to fit over a shaped area to be protected, e.g. the bust of a female wearer. The armour's shaped part is held in shape by a series of darts (37) in successive layers (30) of the material. Each dart in a material layer comprises a generally V-shaped section (35) whose edges (37) are joined to form the dart. The V-shaped section (35) of the material is folded on itself to form a pleat (40) which is folded over to one side of the dart (37) to form an added thickness overlaying or underlying an adjacent part of the material (30). The darts (37) are angularly offset from one another with the pleats (40) oriented in directions so that the added thickness is distributed substantially evenly, thereby avoiding bulges or stiffness and improving the wearing comfort.

