

(12) **UK Patent Application** (19) **GB** (11) **2 391 792** (13) **A**

(43) Date of Printing by UK Office **18.02.2004**

(21) Application No: **0315000.0**
(22) Date of Filing: **14.12.2001**
(30) Priority Data:
(31) **09751413** (32) **28.12.2000** (33) **US**

(86) International Application Data:
PCT/US2001/048425 En 14.12.2001

(87) International Publication Data:
WO2002/052967 En 11.07.2002

(71) Applicant(s):
Kimberly-Clark Worldwide, Inc.
(Incorporated in USA - Delaware)
401 North Lake Street, Neenah,
Wisconsin 54956,
United States of America

(72) Inventor(s):
Gerald L Rabe
Joseph Richard Alberts
Joseph Daniel Coenen

(continued on next page)

(51) INT CL⁷:
A41H 42/00 , A61F 13/15

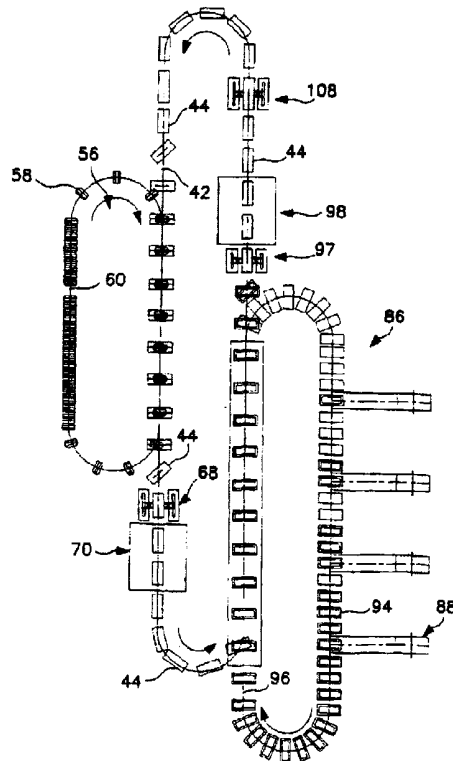
(52) UK CL (Edition W):
A3V V51X V52

(56) Documents Cited by ISA:
WO 1998/044883 A **US 6149637 A**
US 4496360 A
WILSON D: "ROBOTICS TAKE A BRIEF ON ASSEMBLY LINES" DESIGN ENGINEERING, MORGAN-GRAMPIAN LTD. LONDON,GB, 1 February 1998, pages 17 -18, XP000734580 ISSN:0308-8448 the whole document

(58) Field of Search by ISA:
INT CL⁷ **A41B, A41D, A41H, A61F**
Other:

(54) Abstract Title: **Process and apparatus for assembly of garments**

(57) A process and apparatus for making a three-dimensional garment. The process is carried out by loading an insert onto an expandable/retractable process loop fixture. A waist elastic member can be bonded to a waist area of the insert. A garment shell can be applied over the insert and the waist elastic member. A waist area of the garment shell can be attached to the waist elastic member and to the waist area of the insert.



GB 2 391 792 A

GB 2391792 A continuation

(72) cont

**Edward A Drezdron II
Thomas David Ehlert
Donald Merlin Fries (Deceased)
Richard M Konetzke
James Frederick Roth
Robert Eugene Vogt**

(74) Agent and/or Address for Service:

**Frank B Dehn & Co.
179 Queen Victoria Street, LONDON,
EC4V 4EL, United Kingdom**