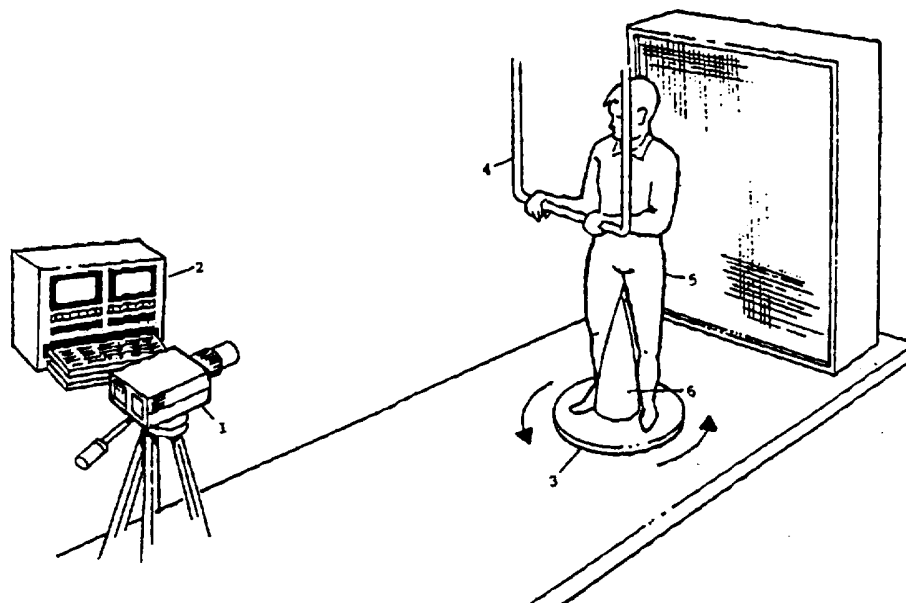




INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

<p>(51) International Patent Classification <sup>6</sup> : G06F 17/00, G06G 7/64, A41H 1/02</p>	<p>A3</p>	<p>(11) International Publication Number: <b>WO 95/04975</b> (43) International Publication Date: 16 February 1995 (16.02.95)</p>
<p>(21) International Application Number: PCT/US94/09065 (22) International Filing Date: 11 August 1994 (11.08.94) (30) Priority Data: 08/105,853 11 August 1993 (11.08.93) US (71) Applicant: LEVI STRAUSS &amp; CO. [US/US]; 1155 Battery Street, San Francisco, CA 94106 (US). (72) Inventors: CROYLE, Gene, F.; 3249 Steven Drive, Plano, TX 75023 (US). LIN, Wei-Chin; 606 Woodhill Circle, Richardson, TX 75081 (US). (74) Agents: HAVERSTOCK, Thomas, B. et al.; Haverstock, Medlen &amp; Carroll, Suite 2200, 220 Montgomery Street, San Francisco, CA 94104 (US).</p>	<p>(81) Designated States: CA, JP, European patent (AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE).  Published <i>With international search report. Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.</i>  (88) Date of publication of the international search report: 16 March 1995 (16.03.95)</p>	

(54) Title: AUTOMATIC GARMENT INSPECTION AND MEASUREMENT SYSTEM



(57) Abstract

An automatic garment inspection and measurement system can create a two-dimensional or three-dimensional electronic representation (11) of an object (5). This electronic representation (11) can then be combined with other electronic representations (11) to create a database (25) of measurements from which standard patterns can be generated for use in manufacturing garments. The electronic representation (11) can also be used to compare the manufactured object it represents to an ideal representation in order to determine if the object's measurements are within a predetermined tolerance of the ideal representation. A machine vision system (1) is used to capture an image of the object (5) and convert that image into a digital representation (11) which can then be added to a database (25) to be used to compile an ideal pattern or can be compared to an already existing ideal image to determine if the object (5) is the correct size.

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INTERNATIONAL SEARCH REPORT

International application No.  
PCT/US94/09065

**A. CLASSIFICATION OF SUBJECT MATTER**

IPC(6) : G06F 17/00; G06G 7/64; A41H 1/02  
US CL : 364/468, 470; 395/118, 119; 356/376

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)

U.S. : 364/468, 470; 395/118, 119; 356/376, 394; 358/96, 101; 382/8

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched  
NONE

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)  
APS, search terms: custom?(2a)(garment# or tailor?); rotat?; model# or person# or object#

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US, A, 4,019,036 (Hiramatsu et al) 19 April 1977, abstract and col. 1-4.	1
Y	US, A, 4,546,434 (Gioello) 08 October 1985, see invention summary.	1-26
Y	US, A, 4,821,200 (Oberg) 11 April 1989, see figure 1 and entire specification.	19, 34
Y	US, A, 4,926,344 (Collins et al) 15 May 1990, see Figure 1 and text associated therewith.	27-33, 34-44
X	US, A, 4,885,844 (Chun) 12 December 1989, see col. 6, line 66 to col. 7, line 68.	1-4
----- Y		----- 5-44

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

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Date of the actual completion of the international search  
21 SEPTEMBER 1994

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Commissioner of Patents and Trademarks  
Box PCT  
Washington, D.C. 20231

Authorized officer  
PAUL GORDON  
Telephone No. (703) 305-9760

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PCT/US94/09065

**C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT**

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US, A, 5,016,183 (Shyong) 14 May 1991, col. 5.	1
Y	US, A, 5,163,006 (Deziel) 10 November 1992, figure 1 and 12, and col. 2-6.	1-44