06 Mar 03

20030157 4-0

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau

162162

(43) International Publication Date
11 April 2002 (11.04.2002)

PCT

(10) International Publication Number
WO 02/29389 A1

(51) International Patent Classification[7]: G01N 21/85

(21) International Application Number: PCT/US01/24434

(22) International Filing Date: 2 August 2001 (02.08.2001)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
09/677,612 3 October 2000 (03.10.2000) US

(71) Applicant: GENERAL ELECTRIC COMPANY [US/US]; 1 River Road, Schenectady, NY 12345 (US).

(72) Inventors: HANAGANDI, Vijay, Kumar, M.; 5549 Calle Las Palmas, Evansville, IN 47712 (US). NELSON, Mark, Erik; 310 East 3rd Street, Mount Vernon, IN 47620 (US). RAJAMANI, Ravi (NMN); 71 Brainard Road, West Hartford, CT 06117 (US).

(74) Agents: SNYDER, Bernard et al.; General Electric Company, 3135 Easton Turnpike, Fairfield, CT 06431 (US).

(81) Designated States *(national)*: JP, SG.

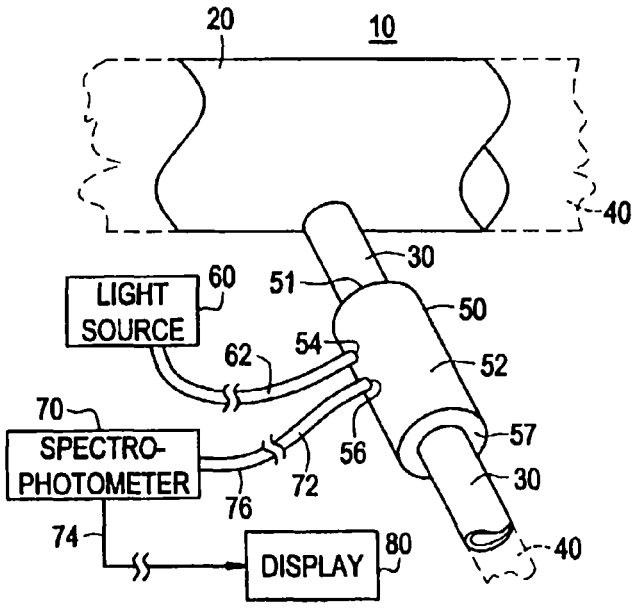
(84) Designated States *(regional)*: European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR).

Published:
— *with international search report*
— *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments*

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

ACTION

(54) Title: ON-LINE SYSTEM FOR MEASURING PROPERTIES OF A PRODUCT



(57) Abstract: An on-line sensor (50) is provided that supplies light to a spectrophotometer (70) to measure the color a product (40) extruded through a conduit (20) having a bypass section (30). The on-line sensor (50) includes a transparent member (500) with an opaque outer surface (52) and an interior portion (540) extending from a first end (51) to a second end (57) to the transparent member (500). The interior portion (540) is connected to the bypass section (30), and the product (40) that flows through the bypass section (30) is supplied to the interior section (540) of the transparent member (500). A light source (60) connected to the transparent member (500) and provides light to the transparent member (500) inside the opaque outer surface (52). A light receiver (72) is connected to the transparent member (500) that is affected by the producet (40). The captured light is supplied to the spectrophotometer (70) to at least measure the properties of the product (40) supplied to the interior portion (540) of the transparent member (500).

WO 02/29389 A1