

Title (en)  
Inspecting machine

Title (de)  
Inspektionsmaschine

Title (fr)  
Machine de contrôle

Publication  
**EP 1130384 A8 20011205 (DE)**

Application  
**EP 01112238 A 19940729**

Priority  
• DE 9311405 U 19930730  
• DE 9313115 U 19930901  
• EP 94924822 A 19940729

Abstract (en)  
[origin: US5729340A] PCT No. PCT/EP94/02523 Sec. 371 Date Mar. 27, 1995 Sec. 102(e) Date Mar. 27, 1995 PCT Filed Jul. 29, 1994 PCT Pub. No. WO95/04267 PCT Pub. Date Feb. 9, 1995An inspection machine for transilluminatable bottles inspects the sidewalls of bottles by transmitting a diffused beam of light through the sidewall and using a plurality of mirrors appropriately arranged for detecting or recording the images emergent from the bottle in different directions in the same image recording camera. The arrangement requires at least two separate beam paths and mirrors in each path directing the bottle emergent beams to the camera while the bottles are being conveyed through a position in which they are illuminated. In an improved arrangement, there is a separate cooperating series of beam deflecting mirrors which generate at least three independent beam paths that impinge from different directions on the sidewall of the bottle being inspected. The recording device is preferably a camera having a charge coupled device image plate.

IPC 1-7  
**G01N 21/90**; **B07C 5/12**; **B07C 5/34**

IPC 8 full level  
**B07C 5/12** (2006.01); **B07C 5/34** (2006.01); **G01B 11/16** (2006.01); **G01N 21/90** (2006.01)

CPC (source: EP KR US)  
**B07C 5/122** (2013.01 - EP US); **B07C 5/126** (2013.01 - EP US); **B07C 5/3408** (2013.01 - EP US); **B07C 5/3416** (2013.01 - EP US); **G01N 21/90** (2013.01 - KR); **G01N 21/9036** (2013.01 - EP US)

Cited by  
DE102005036796A1; IT202200001496A1; DE202005020478U1; EP1750117A2

Designated contracting state (EPC)  
DE FR GB IT

DOCDB simple family (publication)  
**US 5729340 A 19980317**; BR 9405536 A 19990908; DE 59410287 D1 20030618; DE 59410415 D1 20051208; DE 59410463 D1 20110512; EP 0663069 A1 19950719; EP 0663069 B1 20051102; EP 1130384 A1 20010905; EP 1130384 A8 20011205; EP 1130384 B1 20030514; EP 1553405 A2 20050713; EP 1553405 A3 20050907; EP 1553405 B1 20110330; JP 3604388 B2 20041222; JP H08505947 A 19960625; KR 950703733 A 19950920; WO 9504267 A1 19950209

DOCDB simple family (application)  
**US 40691195 A 19950327**; BR 9405536 A 19940729; DE 59410287 T 19940729; DE 59410415 T 19940729; DE 59410463 T 19940729; EP 01112238 A 19940729; EP 05005396 A 19940729; EP 9402523 W 19940729; EP 94924822 A 19940729; JP 50557295 A 19940729; KR 19950700954 A 19950310