

Title (en)

ACOUSTO-OPTIC TUNABLE FILTER-BASED SURFACE SCANNING SYSTEM AND PROCESS.

Title (de)

OBERFLÄCHENABTASTSYSTEM UND VERFAHREN AUF DER BASIS AKUSTO-OPTISCHER FILTER.

Title (fr)

SYSTEME ET PROCEDE DE BALAYAGE DE SURFACE AU MOYEN D'UN FILTRE ACOUSTO-OPTIQUE ACCORDABLE.

Publication

EP 0637375 A1 19950208 (EN)

Application

EP 93915111 A 19930423

Priority

- US 9303831 W 19930423
- US 87393792 A 19920424

Abstract (en)

[origin: WO9322655A1] A scanning system (10) for inspecting a surface (16) including a light source (30) which generates a beam of light (32) that is reflected, scattered or causes fluorescence at the surface to be inspected. An optical interface (14) receives the beam of light and directs it along a predetermined path extending to and from the surface. An acousto-optic tunable filter (34) tuned to pass light having a wavelength corresponding to a known optical property of a predetermined material is positioned within the path of light. A detector (42) is positioned to receive light emanating from the surface and is configured to monitor the intensity of light at each predetermined wavelength being monitored and generate a corresponding signal. The system is preferably attached to a scan board (90) thereby enabling the system to be used in scanning a surface. The system also includes a signal processor (22) which processes the signal generated by the detector. The resulting data is displayed by an output device (26).

IPC 1-7

G01N 21/17; **G01N 21/35**; **G01N 21/64**

IPC 8 full level

G01B 11/30 (2006.01); **F02K 9/96** (2006.01); **G01B 11/06** (2006.01); **G01N 21/17** (2006.01); **G01N 21/21** (2006.01); **G01N 21/31** (2006.01); **G01N 21/64** (2006.01); **G01N 21/88** (2006.01); **G01N 21/93** (2006.01); **G01N 21/94** (2006.01); **G01J 3/12** (2006.01); **G01N 21/59** (2006.01); **G01N 21/84** (2006.01)

CPC (source: EP)

G01B 11/0625 (2013.01); **G01N 21/17** (2013.01); **G01N 21/314** (2013.01); **G01N 21/6456** (2013.01); **G01N 21/8806** (2013.01); **G01N 21/94** (2013.01); **G01J 3/1256** (2013.01); **G01N 21/21** (2013.01); **G01N 21/4738** (2013.01); **G01N 21/474** (2013.01); **G01N 21/5911** (2013.01); **G01N 21/8422** (2013.01); **G01N 21/93** (2013.01); **G01N 2021/3133** (2013.01); **G01N 2021/4709** (2013.01); **G01N 2021/8427** (2013.01); **G01N 2021/945** (2013.01)

Designated contracting state (EPC)

AT BE CH DE DK FR GB IT LI NL SE

DOCDB simple family (publication)

WO 9322655 A1 19931111; AU 4521893 A 19931129; CA 2133307 A1 19931111; EP 0637375 A1 19950208; EP 0637375 A4 19960529; JP H08500432 A 19960116

DOCDB simple family (application)

US 9303831 W 19930423; AU 4521893 A 19930423; CA 2133307 A 19930423; EP 93915111 A 19930423; JP 51939893 A 19930423