

Title (en)
INTEGRATED OPTICS BLOCK FOR SPECTROSCOPY

Title (de)
INTEGRIERTER OPTISCHER BLOCK FÜR DIE SPEKTROSKOPIE

Title (fr)
BLOC D'OPTIQUE INTEGREE POUR SPECTROSCOPIE

Publication
EP 1252500 A2 20021030 (EN)

Application
EP 00947323 A 20000712

Priority
• US 0019101 W 20000712
• US 35449799 A 19990716

Abstract (en)
[origin: WO0106232A2] Percentage concentrations of constituents of a sample of cereal grain or other agricultural product in a flowing stream are determined while harvesting or processing using a short wave near infrared analyzer. The analyzer irradiates the sample, picks up diffuse reflectance of individual wavelengths from the sample and spatially separates the diffuse reflectance into a response at individual wavelengths. The result is to simultaneously detect the intensities of the individual wavelengths in parallel from the same portion of the product being analyzed. Percentage constituents of the composite substance may then be compared with known percentage constituents to determine the constituents in the sample product. The inventive wavelength analyzer is suitable for attaching to the agricultural combine to perform real time measurements in the field.

IPC 1-7
G01N 21/35; **G01N 21/85**; **A01D 41/12**

IPC 8 full level
A01D 41/127 (2006.01); **G01J 3/02** (2006.01); **G01J 3/42** (2006.01); **G01N 21/27** (2006.01); **G01N 21/35** (2006.01); **G01N 21/85** (2006.01); **G01J 3/28** (2006.01)

CPC (source: EP)
A01D 41/1277 (2013.01); **G01J 3/02** (2013.01); **G01J 3/0205** (2013.01); **G01J 3/0218** (2013.01); **G01J 3/0232** (2013.01); **G01J 3/0256** (2013.01); **G01J 3/0262** (2013.01); **G01J 3/42** (2013.01); **G01J 3/502** (2013.01); **G01N 21/3563** (2013.01); **G01N 21/359** (2013.01); **G01N 21/85** (2013.01); **G01J 2003/2866** (2013.01)

Citation (search report)
See references of WO 0106232A2

Citation (examination)
EP 0491131 A1 19920624 - HEWLETT PACKARD CO [US]

Cited by
CN107764767A

Designated contracting state (EPC)
DE ES FR GB IT

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WO 0106232 A2 20010125; **WO 0106232 A3 20020829**; **WO 0106232 A9 20020711**; AR 025205 A1 20021113; AU 6095300 A 20010205; AU 777591 B2 20041021; CA 2380392 A1 20010125; EP 1252500 A2 20021030; JP 2003510560 A 20030318

DOCDB simple family (application)
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