

Title (en)

GENUINE/COUNTERFEIT DISTINGUISHING UNIT, GENUINE/COUNTERFEIT DISTINGUISHING METHOD, AND FLUORESCENT SENSOR

Title (de)

EINHEIT ZUR UNTERScheidung VON ORIGINAL UND PLAGIAT, VERFAHREN ZUR UNTERScheidung VON ORIGINAL UND PLAGIAT SOWIE FLUORESENZSENSOR

Title (fr)

UNITÉ ET PROCÉDÉ DE DISTINCTION AUTHENTIQUE/CONTREFAÇON ET CAPTEUR DE FLUORESCENCE

Publication

EP 2549445 A1 20130123 (EN)

Application

EP 10847870 A 20100317

Priority

JP 2010054537 W 20100317

Abstract (en)

Fluorescent substances having similar peak wavelengths for fluorescence excited by irradiation of excitation light are to be detected in distinction. In order to solve this issue, a UV_LED irradiates excitation light to a leaf of paper, a first light-reception unit receives light having a first wavelength range that includes the peak wavelength of fluorescence excited by a fluorescent substance due to irradiation of excitation light, and a second light-reception unit receives light emitted from the same area as the area on the leaf of paper that emitted light to be received by the first light-reception unit, said light having a second wavelength range that is positioned near the first wavelength range. Then, a fluorescent substance specifying unit specifies the type of fluorescent substance added to the leaf of paper on the basis of outputs from the first light-reception unit and the second light-reception unit, and an evaluation unit evaluates whether the leaf of paper is genuine or counterfeit on the basis of the result evaluated by the fluorescent substance specifying unit.

IPC 8 full level

G07D 7/12 (2006.01)

CPC (source: EP US)

G07D 7/1205 (2017.04 - EP); **G07D 7/121** (2013.01 - EP US)

Cited by

CN105556578A; EP3054427A4; US10083562B2; US10636239B2; WO2017013642A1; US9741194B2; US9897545B2

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