

Title (en)

POLYMER FILAMENTS USED AS A THERMOLUMINESCENT DOSIMETER

Title (de)

POLYMER-FILAMENT UND IHRE VERWENDUNG ALS THERMOLUMINESZENZDOSIMETER

Title (fr)

FILAMENTS DE POLYMERES POUR UNE UTILISATION EN TANT QUE DOSIMETRE THERMOLUMINESCENT

Publication

EP 1163538 A1 20011219 (FR)

Application

EP 00914249 A 20000324

Priority

- FR 0000745 W 20000324
- FR 9903729 A 19990325

Abstract (en)

[origin: WO0058755A1] The invention relates to a filament comprising thermoluminescent particles that are evenly distributed in a polymer matrix, characterized in that the polymer matrix is a thermoplastic polymer having sufficient adhesion with respect to said thermoluminescent particles in order to ensure the cohesion of said filament and being such that the thermoluminescent response (signal) of the filament corresponds substantially to the dose of radiation absorbed and obtained after the filament is placed in contact with a physiological medium. The invention also relates to a method for thermoluminescence-based measurement of doses of beta radiation delivered by a transmitter on a target organ of a mammal, characterized in that a group of inventive filaments is introduced to the desired spot, whereby part of the length of said filaments remains outside the irradiated area, and in that the filaments are removed after irradiation and thermoluminescence is determined.

IPC 1-7

G01T 1/11

IPC 8 full level

G01T 1/11 (2006.01)

CPC (source: EP US)

G01T 1/11 (2013.01 - EP US); **Y10T 428/2913** (2015.01 - EP US); **Y10T 428/2927** (2015.01 - EP US)

Cited by

US5754959A

Designated contracting state (EPC)

AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

DOCDB simple family (publication)

WO 0058755 A1 20001005; AU 3564500 A 20001016; EP 1163538 A1 20011219; FR 2792078 A1 20001013; FR 2792078 B1 20040827; US 6531217 B1 20030311

DOCDB simple family (application)

FR 0000745 W 20000324; AU 3564500 A 20000324; EP 00914249 A 20000324; FR 9903729 A 19990325; US 93728502 A 20020304