

Title (en)

Incandescent lamps having integrally supported filaments.

Title (de)

Glühlampen mit integrierten Glühwendelhaltern.

Title (fr)

Lampes à incandescence à supports de filaments intégrés.

Publication

**EP 0533478 A1 19930324 (EN)**

Application

**EP 92308493 A 19920917**

Priority

US 76155391 A 19910918

Abstract (en)

Incandescent lamps comprising a vitreous envelope containing an elongated, continuous tungsten wire filament having a plurality of filament segments and a plurality of integral filament supports for supporting the filament within the lamp envelope. The filament segments may be straight or coiled and are connected to each other by the integral supports. <IMAGE>

IPC 1-7

**H01K 1/24**

IPC 8 full level

**G02B 5/28** (2006.01); **H01K 1/14** (2006.01); **H01K 1/18** (2006.01); **H01K 1/24** (2006.01); **H01K 1/32** (2006.01)

CPC (source: EP KR)

**H01K 1/24** (2013.01 - EP KR)

Citation (search report)

- [X] US 3223875 A 19651214 - REINHOLD EGgers
- [X] DE 1122165 B 19620118 - PATENT TREUHAND GES FUER ELEKTRISCHE GLUEHLAMPEN MBH
- [A] EP 0343721 A1 19891129 - PHILIPS NV [NL]
- [XP] PATENT ABSTRACTS OF JAPAN vol. 13, no. 184 (E-751)28 April 1989 & JP-A-10 10 569 ( TOSHIBA CORP. ) 13 January 1989

Cited by

CN103155096A; EP0949659A3; US8581492B2; US6469426B1; WO2012054164A1; WO2008050253A3

Designated contracting state (EPC)

BE DE ES FR GB IT NL

DOCDB simple family (publication)

**EP 0533478 A1 19930324**; CA 2076078 A1 19930319; JP H05205705 A 19930813; KR 930006764 A 19930421

DOCDB simple family (application)

**EP 92308493 A 19920917**; CA 2076078 A 19920813; JP 24698492 A 19920917; KR 920016902 A 19920917