Title (en)

Detector for detecting electrically neutral particles, especially neutrons, using a gas-filled housing

Title (de)

Detektor zum Nachweis elektrisch neutraler Teilchen, insbesondere Neutronen, unter Benutzung eines mit einem Zählgas gefüllten Gehäuses

Title (fr)

Capteur pour détecter des particules neutres, en particulier des neutrons, avec un boîtier rempli de gaz

Publication

EP 1202322 B1 20041229 (DE)

Application

EP 00122360 A 20001024

Priority

EP 00122360 A 20001024

Abstract (en)

[origin: EP1202322A1] The detector has a detector housing (10) with detector gas, at least one converter (22) that produces a conversion product by absorbing the particles to be detected, whereby the conversion products produce electrically charge particles in the detector gas, at least one readout device (19) for detecting charged particles and at least one drift field generator (18) for producing a field that causes charged particles to drift to the read-out device. Independent claims are also included for the following: a converter for a detector, a method of manufacturing a converter and a detection method for detecting electrically neutral particles, especially neutrons.

IPC 1-7

H01J 47/12

IPC 8 full level

H01J 47/12 (2006.01)

CPC (source: EP US)

H01J 47/1211 (2013.01 - EP US)

Citation (examination)

Brahme A. et al: 'Evaluation of a GEM and CAT-based detector for radiation therapy beam monitoring', Konferenzbeitrag zu SAMBA 99, Siegen, 6.-8. Oktober 1999, veröffentlicht in Nucl. Instr. and Meth. A 454, S. 136-141, 1.November 2000

Cited by

EP3537183A1; DE102018105026A1

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)

EP 1202322 A1 20020502; **EP 1202322 B1 20041229**; AT E286302 T1 20050115; DE 50009131 D1 20050203; US 2002139935 A1 20021003; US 7635849 B2 20091222

DOCDB simple family (application)

EP 00122360 A 20001024; AT 00122360 T 20001024; DE 50009131 T 20001024; US 4755601 A 20011023