

Title (en)  
TRITIUM DETECTION IN GASES

Publication  
**EP 0036163 B1 19850227 (DE)**

Application  
**EP 81101723 A 19810309**

Priority  
DE 3009563 A 19800313

Abstract (en)  
[origin: EP0036163A2] 1. Apparatus for continuously detecting very small amounts of radioactivity comprising tritium in a gas mixture which is suitable as a filling for a tube counter, wherein the device consists of a counter chamber (7) through which the gas mixture can flow and in which one or more counter wires (8, 9, 10) are clamped and wherein the counter chamber is surrounded by a heater, characterised by the following features - (a) the counter chamber (7) is surrounded by a housing (1, 2, 4) which is designed for high pressures, for example 6 bar ; (b) the counter chamber (7) is separated from the housing (1, 2, 4) by a moulded ceramic body (6) ; (c) in the counter chamber (7), a number of very thin counter wires (8, 9, 10) are arranged in parallel planes ; (d) the gas supply and the arrangement of the counter wires (8, 9, 10) in the counter chamber (7) are such that the counter wires (8, 9, 10) are everywhere aligned to be as parallel as possible to the direction of flow.

IPC 1-7  
**H01J 47/06**

IPC 8 full level  
**G01T 1/18** (2006.01); **G01N 27/64** (2006.01); **G01T 1/167** (2006.01); **H01J 47/06** (2006.01)

CPC (source: EP)  
**H01J 47/062** (2013.01)

Designated contracting state (EPC)  
DE FR GB NL

DOCDB simple family (publication)  
**EP 0036163 A2 19810923**; **EP 0036163 A3 19820428**; **EP 0036163 B1 19850227**; DE 3009563 A1 19810917; DE 3169125 D1 19850404; JP H0330838 B2 19910501; JP S56143976 A 19811110

DOCDB simple family (application)  
**EP 81101723 A 19810309**; DE 3009563 A 19800313; DE 3169125 T 19810309; JP 3516081 A 19810311