

Title (en)  
METHOD AND APPARATUS FOR MEASURING RADIOACTIVE DECAY.

Title (de)  
VERFAHREN UND VORRICHTUNG ZUM MESSEN DES RADIOAKTIVEN ZERFALLS.

Title (fr)  
PROCEDE ET APPAREIL POUR MESURER LA DESINTEGRATION RADIO-ACTIVE.

Publication  
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Application  
**EP 83903332 A 19830927**

Priority  
US 8301479 W 19830927

Abstract (en)  
[origin: WO8501584A1] Method and apparatus for counting nuclear scintillations particularly the activity in a specimen containing tritium segregates the pulses which are emitted from a scintillator due on interaction with a nuclear particle from the pulses attributable to random noise. The system uses a single photomultiplier (12), the output of which is split among a two-path circuit (22, 32). A pulse height analyzer (46) provides an output when one path (32) has an integrated output signal of preselected amplitude when the other path (22) output has a preselected number of component photon response pulses occurring in a preselected period of time. The system is operable with many scintillation materials as long as the characteristic output from the scintillator is long relative to the duration of a random noise pulse. The preferred embodiment incorporates a solid scintillator although a liquid material may be substituted if the functional criteria are satisfied. Also discussed is the response of an apparatus in accordance with the present invention if some relatively high energy isotopes such as carbon-fourteen are tested.

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• [A] US 4251744 A 19810217 - GREEN WALTER K  
• See references of WO 8501584A1

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