

Title (en)

A SAMPLE TRAPPING ION MOBILITY SPECTROMETER FOR PORTABLE MOLECULAR DETECTION

Title (de)

IONENBEWEGLICHKEITSSPEKTROMETER MIT PROBENEINFANG FÜR TRAGBARE MOLEKÜLDETEKTION

Title (fr)

SPECTROMETRE DE MOBILITE IONIQUE A PIEGEAGE D'ECHANTILLONS POUR DETECTEUR AMBULATOIRE DE MOLECULES

Publication

EP 1025577 A1 20000809 (EN)

Application

EP 98953728 A 19981020

Priority

- US 9822092 W 19981020
- US 6268297 P 19971022

Abstract (en)

[origin: WO9921212A1] A "cold" ion mobility spectrometer (IMS) device (100) deliberately operates at a temperature low enough that sample vapors condense, i.e., are trapped, in the IMS (100) after their introduction with a condensing liner (117) in a reaction region (102) of the IMS (100). The deliberate trapping of the vapors in the IMS (100) effectively removes the sample from the ionization process because after condensation, the vapor pressure of the compound at the operating temperature of the IMS (100) is negligible. Since the compound is no longer present in vapor form, ion production no longer takes place at a sufficient rate to be detectable.

IPC 1-7

H01J 49/04; H01J 49/40; B01D 59/44

IPC 8 full level

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CPC (source: EP US)

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Citation (search report)

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