

Title (en)
Method for measuring the concentration in a gas mixture

Title (de)
Verfahren zur Konzentrationsmessung an Gasgemischen

Title (fr)
Méthode pour la mesure de la concentration dans un mélange gazeux

Publication
EP 0290711 B2 19980715 (DE)

Application
EP 87890178 A 19870720

Priority
AT 122687 A 19870514

Abstract (en)
[origin: WO8809052A1] In order to determine the concentration of individual types of molecules in a gas mixture, the mixture is subjected to a selective preliminary treatment and the resultant product is examined by mass spectrometry. The concentrations of molecules of equal molecular mass are determined separately by ionizing the gas mixture by means of primary ions having an internal energy slightly greater than that required to obtain the product ions which represent the particular type of molecule of interest and an impact energy of such magnitude that the kinetic effect on the ionization is negligible compared with the influence of the internal energy. The mass spectrometric examination of the product ions then provides in a simple and precise way the desired concentration of the individual types of molecules.

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IPC 8 full level
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CPC (source: EP US)
H01J 49/063 (2013.01 - EP US); **H01J 49/145** (2013.01 - EP US); **Y10T 436/24** (2015.01 - EP US)

Cited by
DE19607155A1; EP0647847A1; US5523565A; US6982416B2; EP3418714A1; WO2018234245A1

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