

Title (en)

METHOD AND DEVICE FOR PROVIDING A DEFINED FLUID FLOW, ESPECIALLY FOR USE IN LIQUID CHROMATOGRAPHY

Title (de)

VERFAHREN UND VORRICHTUNG ZUR BEREITSTELLUNG EINES DEFINIERTEN FLUIDSTROMS, INSBESONDERE FÜR DIE FLÜSSIGKEITSCHROMATOGRAPHIE

Title (fr)

PROCEDE ET DISPOSITIF DE MISE EN OEUVRE D'UN COURANT FLUIDIQUE DEFINI, NOTAMMENT POUR LA CHROMATOGRAPHIE LIQUIDE

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Application

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Abstract (en)

[origin: WO2005062036A2] The invention relates to a method for providing a defined fluid flow, especially for use in liquid chromatography. According to the method, a constant total flow (f_0) is subdivided into an internal excess flow (f_{ie}) in an excess branch and into an internal working flow (f_{iw}) in a working branch. The ratio of subdivision of the internal working flow (f_{iw}) and the internal excess flow (f_{ie}) depends on the reverse ratio of a fluidic resistance provided in the working branch and a fluidic resistance in the excess branch. The excess branch and the working branch are interlinked at the respective outputs of the two fluidic outputs of the fluidic resistances by a cross-branch. The equalizing flow occurring between the outputs of the fluidic resistances is measured by means of a flow sensor. A desired, external working flow in the further course of the working branch can be fed to a working device, for example a chromatography column mounted downstream of the device. Further down the excess branch a variable fluidic resistance device is arranged. The resistance value of the variable fluidic resistance device is controlled, thereby controlling the equalizing flow in such a manner that the equalizing flow, preferably in the temporal mean, is substantially zero or equals a defined offset value whose amount is small compared to the internal working flow (f_{iw}). The invention also relates to a device for carrying out the inventive method.

IPC 8 full level

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