

Title (en)

METHOD FOR THE COLORIMETRIC QUANTIFICATION OF IONS

Title (de)

METHODE ZUR KOLORIMETRISCHEN QUANTIFIZIERUNG VON IONEN

Title (fr)

PROCEDE DE QUANTIFICATION COLORIMETRIQUE D'IONS

Publication

EP 0910447 A1 19990428 (EN)

Application

EP 97934036 A 19970707

Priority

- US 9711446 W 19970707
- US 67912396 A 19960712

Abstract (en)

[origin: WO9802224A1] A method for the colorimetric quantification of a targeted ion from a source solution, which may contain other ions in greater concentrations, comprises bringing a measured volume of the source solution into contact with a porous web or membrane having enmeshed therein an ion recognition substrate which has a selective affinity for the targeted ion. The ion recognition substrate selectively and quantitatively traps the targeted ion, for example, through covalent, or ionic bonds, chelation, complexation or organo-metal dative bonds. Following removal of the source solution, the concentration of the targeted ion in the original solution, may be detected and quantified by, for example, visual comparison or densitometric techniques. The ions which are trapped in the web or membrane can be (a) self-colored through interaction with the ion recognition substrate or (b) subjected to a second solution which contains a developer. The developer, which may be colorless or of a different color, is chosen because it will selectively react with the targeted ion or, because of the presence of the targeted ion, cause the formation of a colored or color changed product. The density of the color can be correlated to the concentration of the targeted ion in the measured source solution.

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Citation (search report)

See references of WO 9802224A1

Citation (third parties)

Third party :

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