

[54] CHROMATOGRAPHY APPARATUS

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[57] ABSTRACT

A chromatography apparatus incorporating an improved means for connecting the ligand to the solid support is disclosed. The apparatus comprises a chamber containing a solid support. The solid support is a hydrophobic support. The apparatus includes chromatography surfactants bonded to the solid support. The surfactants comprise a polar group, a hydrophobic functional group substituted on the polar group, and a chromatographic functional group substituted on the polar group. The hydrophobic group is hydrophobically adsorbed to the solid support so that the chromatographic functional group is bound to the solid support and available for binding to compounds which selectively bind thereto. Compositions for and methods of making the foregoing are disclosed.

The chromatographic functional group is a ligand for affinity chromatography, an ionogenic group for ion exchange chromatography, or a hydrophobic group for hydrophobic chromatography.

Hydrophobic silica particles are preferably used as the solid support, with hydrophobic polymers more preferred. Polyalkoxy groups are preferably used as the polar groups. Covering surfactants are preferably adsorbed to the solid support to reduce non-specific binding thereto.

11 Claims, 2 Drawing Sheets

