

Title (en)
SOLID PHASE ORGANIC SYNTHESIS DEVICE WITH PRESSURE-REGULATED MANIFOLD

Title (de)
FESTPHASENSYNTHESEVORRICHTUNG MIT DRUCKREGULIERTEM VERTEILERBLOCK

Title (fr)
DISPOSITIF DE SYNTHESE ORGANIQUE EN PHASE SOLIDE MUNI D'UN COLLECTEUR REGULE PAR PRESSION

Publication
EP 0917493 A1 19990526 (EN)

Application
EP 97938249 A 19970811

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Abstract (en)
[origin: WO9806490A1] A solid phase organic synthesis device (10) comprising a manifold (12) and an optional heating block (16) mounted to an upper surface of the manifold. The manifold includes an internal cavity and a first array of holes (33) coupled to the internal cavity. The heating block (16) includes a second array of holes (52) vertically aligned with the corresponding holes (33) of the first array. The first and second arrays of holes (33, 52) are adapted to accommodate flow-through reaction vessels (54). Each reaction vessel (54) is secured in one of the holes (33) of the first array and a vertical-aligned one of the holes of the second array (54). The interiors of the reaction vessels (54) are in communication with the internal cavity of the manifold (12). The flow-through reaction vessels (54), which contain solid phase resins for solid phase organic synthesis, are controlled by regulating the pressure within the manifold. The manifold (12) includes a pressure port (24) coupled to both an inert gas source and a pressure control device (25), and a vacuum port (26) coupled to a vacuum control device (31) and a vacuum source. The pressure control device (25) and the vacuum control device (31) are easily operated to create a vacuum and varying degrees of positive pressure within the manifold (12) as required when carrying out an organic synthesis. A second manifold (63) is mounted on the first manifold (12) in the absence of the reaction vessels (54) for supplying inert gas used to concentrate organic synthesis products.

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