

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

Title (de)  
FESTPHASENSYNTHESEVORRICHTUNG MIT DRUCKREGULIERTEM VERTEILERBLOCK

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

Publication  
**EP 0917493 A1 19990526 (EN)**

Application  
**EP 97938249 A 19970811**

Priority  
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• US 90012097 A 19970725

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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