

Title (en)  
CYCLONIC SEPARATOR ASSEMBLY AND METHOD

Title (de)  
ZYKLONABSCHIEDERANORDNUNG UND VERFAHREN

Title (fr)  
ENSEMBLE SEPARATEUR A CYCLONE ET PROCEDE

Publication  
**EP 0874694 B1 19990908 (EN)**

Application  
**EP 97900336 A 19970113**

Priority  
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Abstract (en)  
[origin: WO9725150A1] Downhole apparatus (13) for separation of oil from oily water or water from oil having an internal chamber (20) continuously flooded with production fluids from a well, one or more hydrocyclonic separators (2) for separating the production fluid into a stream enriched in oil and a stream depleted in oil. The clearance required between the apparatus (13) and the well casing (17) being the minimum required for running the apparatus into the casing (17), maximizing the size of the separator(s) and improving capacity. A range of artificial lift devices is included to bring the oil enriched stream to the surface if the natural pressure of the reservoir is insufficient. Substantial axial overlap of multiple separators is provided for better compactness and capacity of the apparatus. Pipes (5) from separator overflow outlets connect to a common overflow manifold (7), and pipes (6) from the separator underflow outlets connect to a common underflow manifold (8). Where the space available for pipes (5, 6) and manifolds (7, 8) is limited adjacent to the separators the manifolds (7, 8) may be formed with a non-circular cross section having substantially the same cross-sectional area as adjacent portions of the manifold.

IPC 1-7  
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