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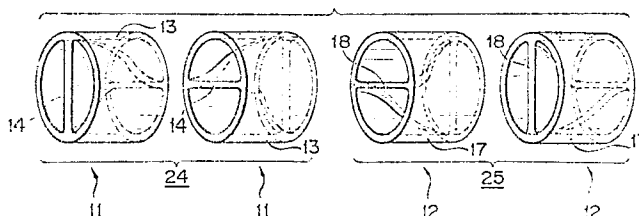
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Mixing element and motionless mixer.

Mixing elements (11), (12) for a motionless mixer comprise passage tubes (13), (17) through which fluids flow and helical blades (14), (18) formed in the passage tubes so as to be integral therewith. The interior of the passage tubes (13), (17) are partitioned by the blades (14), (18) to form a plurality of fluid passages (15, 16), (19, 20). The blade extends from one end of the passage tubes (13), (17) to the other in the longitudinal direction of the passage tube to be twisted helically clockwise (right-handed) or counterclockwise (left-handed). The corner portions (22) of the fluid passages are rounded. The end edges (21) of the blade (14), (18) are curved in the direction of the thickness and rounded. The motionless mixer is formed by alternately and longitudinally coupling right- and left-handed rotation type mixing elements (11), (12). The mixing elements (11), (12) are so arranged that the facing end edges of the blades (14), (18) of each two adjacent mixing elements (11), (12) cross at right angles.





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EUROPEAN SEARCH REPORT

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DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int. Cl. ³)
A	DE-A-2 262 016 (MONO PUMPS) * Claim 1; page 4, paragraph 3; figures 1-6 *	1-4, 9, 12, 15, 18, 20, 21	B 01 F 5/06
A	DE-U-7 733 456 (W. AUGUSTIN) * Claims 1, 2; figures 1-3 *	1, 2, 14 -16	
A	FR-A-2 355 556 (J.P. DE VLIÉGER) * Figures 1-6 *	1, 2, 14 -16	
			TECHNICAL FIELDS SEARCHED (Int. Cl. ³)
			B 01 F 5/06
The present search report has been drawn up for all claims			
Place of search BERLIN		Date of completion of the search 20-01-1984	Examiner KUEHN P
CATEGORY OF CITED DOCUMENTS			
X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document		T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document	