

Title (en)
ARRANGEMENT FOR COMBINING DISSIMILAR STREAMS

Title (de)
ANLAGE ZUM KOMBINIEREN VON UNGLEICHEN STRAHLEN

Title (fr)
DISPOSITIF PERMETTANT DE COMBINER DES FLUX DISSEMBLABLES

Publication
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Application
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Abstract (en)
[origin: WO0012202A1] An arrangement and method for effectively mixing two (or more) streams (G1, G2) of dissimilar materials is disclosed. The streams (G1, G2) may comprise two air streams of different temperatures or humidities, two streams of different gaseous materials, or even two streams of different liquids. The arrangement comprises a baffle structure (12) located within the enclosure through which is passing a first stream (G1) of material. A second stream (G2) is then injected into the enclosure at a location downstream from the baffle (12). In practicing the method of the present invention, the passage of the first stream (G1) of material across the baffle (12) results in creating a low pressure region (28) between the baffle (12) and the input port (56) of the second stream (G2). The second stream (G2) then has a natural tendency to enter this low pressure area, thus increasing the mixing efficiency with the first stream (G1) of material. The baffle (12) may comprise a tapered geometry, and multiple sets of baffles and associated input ports may be used to combine multiple streams of materials.

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