CLAIMS

[Claim 1]

A microreactor, comprising:

a plurality of flow paths for a plurality of raw materials with different flow rates to flow therethrough ,respectively;

a first introduction port through which a high-flow-rate material is introduced;

a second introduction port through which a low-flow-rate material is introduced;

a first flow path, in communication with the first introduction port, that branches into a plurality of second paths, wherein the plurality of second paths merge downstream; and

a third flow path, in communication with the second introduction port,

wherein each of the plurality of second paths are merged into the third flow path.

[Claim 2]

The microreactor according to claim 1, wherein

for internal volumes of flow paths when each of the raw materials finally merge, an internal volume of the flow path

for the high-flow-rate raw material is larger than an internal volume of the flow path for the low-flow-rate raw material.

[Claim 3]

The microreactor according to claim 1, wherein

wherein each of the plurality of second paths are merged into the third flow path at a single intersection.

[Claim 4]

The microreactor according to claim 3, wherein

at the single intersection, respective second paths merge into the third flow path on both sides of the third flow path.

[Claim 5]

The microreactor according to claim 1, wherein

wherein each of the plurality of second paths are merged into the third flow path at a single intersection, and

wherein at least one orifice is disposed downstream from the single intersection.

[Claim 6]

The microreactor according to claim 1, wherein

the plurality of second paths merges stepwise into the third flow path.

[Claim 7]

The microreactor according to claim 6, wherein

the plurality of second paths alternately merge into the third flow path from different directions.

[Claim 8]

The microreactor according to claim 7, wherein

the microreactor is configured by two plates,

the flow paths are formed on each of the plates, and

the flow paths are formed such that the plurality of second paths alternately merge with the third flow path from directions of each of the two plates.

[Claim 9]

The microreactor according to claim 1, wherein

a fourth flow path is disposed downstream from a final merging point of the plurality of paths.

[Claim 10]

The microreactor according to claim 1, wherein

a material of the microreactor is polymethylpentene or polyethylene.

[Claim 11]

The microreactor according to claim 1, wherein

a diameter of the flow paths is 2 mm or less.

[Claim 12]

A chemical product manufacturing system, comprising:

at least one microreactor, which includes a plurality of flow paths for a plurality of raw materials with different flow rates to flow therethrough, respectively;

a first introduction port through which a high-flow-rate material is introduced;

a second introduction port through which a low-flow-rate material is introduced;

a first flow path, in communication with the first introduction port, that branches into a plurality of second paths, wherein the plurality of second paths merge downstream; and

a third flow path, in communication with the second introduction port; and

one or more pumps configured to deliver the raw materials to each of the at least one microreactor,

wherein each of the plurality of second paths are merged into the third flow path.