

Title (en)
VOLUMETRIC GAS MIXING DEVICE

Title (de)
VOLUMETRISCHES GASMISCHGERÄT

Title (fr)
DISPOSITIF VOLUMETRIQUE DE MELANGEAGE DE GAZ

Publication
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Application
EP 99968408 A 19991223

Priority
• AU PP793498 A 19981224
• AU PQ257399 A 19990901
• IB 9902113 W 19991223

Abstract (en)
[origin: WO0038497A2] A gas mixing apparatus including a plurality of selected volume gas chambers (20, 22; 66, 67, 68), a pressure regulated gas supply line (15, 16) to each chamber, a valve (40, 41; 69, 70, 71) in the supply line, an outlet line (42, 43; 88, 89, 90) of each chamber to a mixed gas reservoir (46, 73), and an outlet valve (47, 48; 69, 70, 71) in each outlet line. Each outlet line may also include a variable orifice throttle valve (85, 86, 87), enabling proportional mixing during the whole cycle of emptying the chamber. The selected volume gas chambers (66, 67, 68) may have variable volumes and may be cylinders (25, 31) with pistons (24, 30; 66a, 67a, 68a) moveable to change the selected volumes of the chambers. The inlet and outlet valves to the chambers may be a single three-way valve (69, 70, 71) having three gas lines extending therefrom, with one being the pressure regulated gas supply line, a second being a combination of inlet line and outlet line, and a third being a line to the mixed gas reservoir. A baffle (81) in the mixed gas reservoir (46, 73) is useful in mixing the gases upon entry.

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B01F 1/00; **F17C 5/06**; **F17C 7/00**; **G05D 11/16**

IPC 8 full level
B01F 3/02 (2006.01); **B01F 15/04** (2006.01); **B01F 23/10** (2022.01); **F17C 5/06** (2006.01); **F17C 7/00** (2006.01); **F17D 1/02** (2006.01); **G05D 11/16** (2006.01)

CPC (source: EP KR)
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Citation (search report)
• [X] EP 0877196 A2 19981111 - BOC GROUP INC [US]
• [PX] DE 19842413 C1 19991028 - LINDE AG [DE]
• See references of WO 0038497A2

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CN105090738A; CN106609907A

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