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Caggiano

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## [54] VAPORIZATION SYSTEM

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### Related U.S. Application Data

- [63] Continuation of Ser. No. 420,749, Apr. 12, 1995.
- [51] Int. Cl.<sup>6</sup> F02G 5/00; F02M 23/14
- [52] U.S. Cl. 123/545; 165/164; 261/44.2; 261/144; 261/152
- [58] Field of Search 165/164; 123/545; 261/144, 145, 44.2, 42, 43, 152, 153, 155, 156

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### [57] ABSTRACT

A fluid vaporization system comprises a first fluid inlet for receiving a first fluid, a second fluid inlet for receiving a second fluid, and a first discharge aperture for discharging the first fluid and the second fluid. A first connecting passage connects the first fluid inlet and the second fluid inlet in fluid communication with the first discharge aperture, mixes the first fluid and the second fluid to define a fluid mixture, and delivers the fluid mixture to the first discharge aperture. A third fluid inlet receives a third fluid and a second discharge aperture discharges the third fluid. A second connecting passage in heat transfer relationship with the first connecting passage connects the third fluid inlet in fluid communication with the second discharge aperture and delivers the third fluid from the third fluid inlet to the second discharge aperture to effect heat transfer from the third fluid to the fluid mixture such that the fluid mixture is discharged by the first discharge aperture in a vaporized state.

15 Claims, 8 Drawing Sheets

