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(54) **SEMICONDUCTOR PROCESSING SYSTEM**

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ABSTRACT

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A system comprising: a semiconductor processing tool (102) comprising a process chamber (108); a valve module (104) configured to receive a fluid from the process chamber (108) and to selectably direct a flow of said fluid; and a cooling apparatus (402) configured to supply a flow of a cooling fluid to the process chamber (108); wherein the valve module (104) and the cooling apparatus (402) are arranged in a stacked configuration.

