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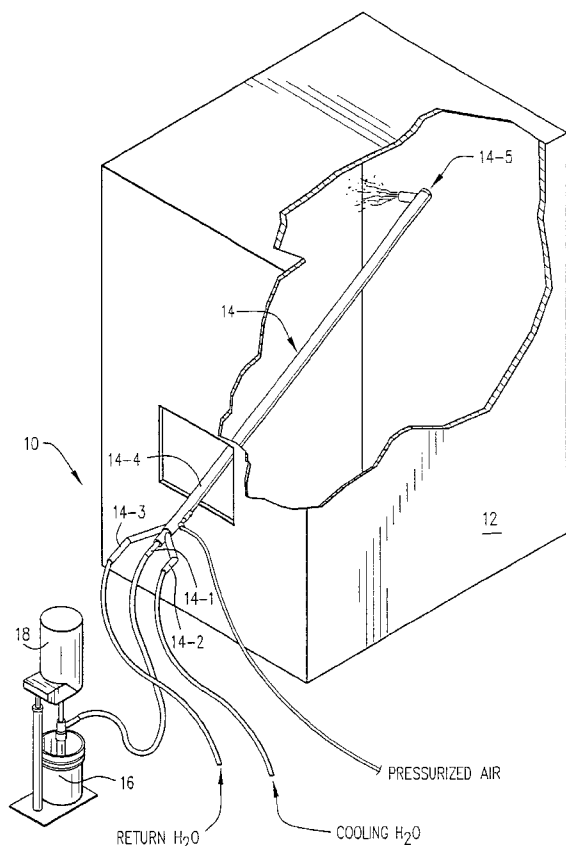
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(54) Title: SYSTEMS AND METHODS FOR THE HIGH TEMPERATURE APPLICATION OF PUMPABLE FIBROUS REFRACTORY MATERIAL



(57) Abstract: Systems (10) and methods are provided whereby pumpable viscous fibrous material may be applied onto surfaces of high temperature process vessels (12) while hot (i.e., while at or near such vessels' high operational temperatures of several hundreds up to several thousands of degrees Fahrenheit). More specifically, there are preferably provided a lance (14,30) having a nozzle structure (14-5) at a distal end thereof, and a pump system (18) for pumping a pumpable fibrous refractory material to the nozzle (14-5). The lance (14) has a length sufficient to allow it to be inserted into the high temperature process vessel (12) so that the nozzle structure (14-5) is adjacent an area in need of repair while an operator holds a proximal end thereof outside the vessel (12). In use, the lance (14,30) is inserted into the process vessel (12) while the process vessel (12) is at or near its high operational temperature so that the nozzle structure (14-5) is positioned adjacent to an area of the process vessel wall in need of repair, and so that the lance (14,30) may be manipulated from outside the process vessel (12) during repair of the wall thereof. Manipulating the lance (14,30) from outside the process vessel will thereby cause the atomized spray of the fibrous material to contact the wall of the process vessel (12) thereby repairing the same.



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