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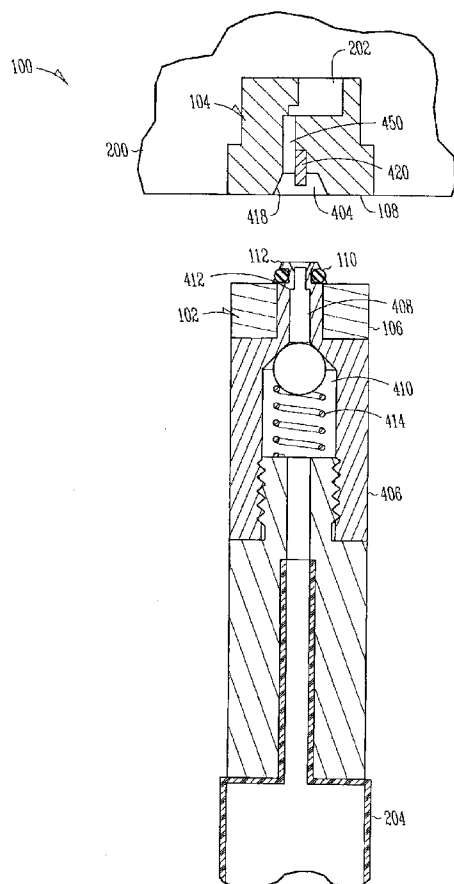
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(54) Title: MAGNETIC FLUID COUPLING ASSEMBLIES AND METHODS



(57) Abstract: Fluid coupling assemblies and methods are discussed. The fluid coupling assemblies include a first coupling member, a second coupling member magnetically engageable with the first coupling member, and a seal member disposed between a portion of the first coupling member and a portion of the second coupling member. A magnetic engagement of the first coupling member and the second coupling member unseals a fluid flow path therebetween. In certain examples, the first coupling member is sealed by a valve member and the second coupling member includes an activation member. When engaged, the valve member is moved from a closed position to an open position by the activation member, thereby unsealing the fluid flow path. A magnetic force between the first coupling member and the second coupling member can be chosen such that the members disengage when a predetermined fluid flow path pressure is reached.

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