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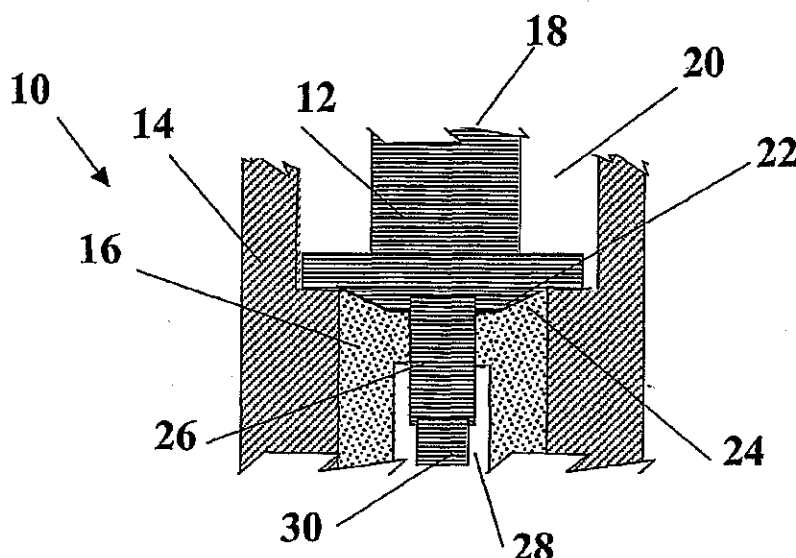
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(54) Title: PERMEABLE GAS ASSEMBLY FOR GAS DELIVERY



(57) Abstract: A valve assembly for controlling gas delivery from a higher pressure fluid source to a lower pressure processing tool comprising a valve poppet movably engageable with a valve seating member and a fluid permeable insert positioned between the valve poppet and the valve seating member that is unexposed to flowing fluid when the valve poppet is in a closed position thereby preventing fluid flow through the valve assembly and provides a diffusional path for transfer of all flowing fluid when the valve poppet is in an open position. The permeable insert can be inserted into the sealable and engageable surface of either the valve seat member or the valve poppet.

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