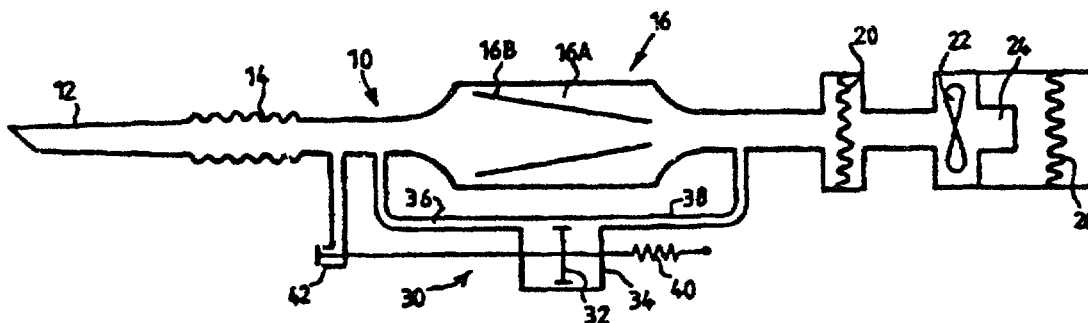




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(54) Title: APPARATUS FOR SEPARATING PARTICLES FROM A FLUID FLOW AND A VALVE FOR INTRODUCING BLEED FLUID TO A MAINSTREAM FLUID



(57) Abstract

A bleed valve (30) for introducing bleed fluid to a mainstream fluid flowing through apparatus (16) across which a pressure differential occurs, characterised in that the bleed valve (30) is adapted to open so as to bleed fluid into the mainstream fluid when the pressure differential across the apparatus (16) falls below a predetermined value. This arrangement is particularly appropriate to vacuum cleaners incorporating cyclonic dust-separating apparatus in that the bleed valve is more reliably operated in response to a reduction in airflow. This ensures efficient functioning of the cyclonic dust-separating apparatus and reduces the risk of overheating of the motor.