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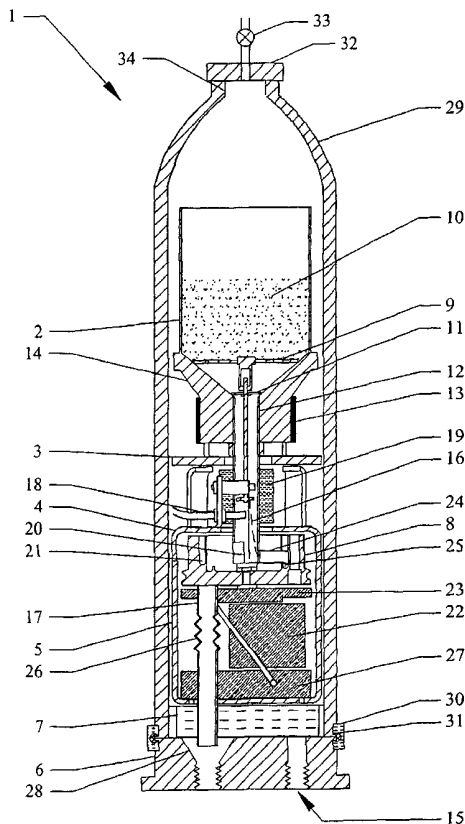
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(54) Title: POWDER SUPPLY DEVICE AND PORTABLE POWDER-DEPOSITION APPARATUS FOR ULTRA-FINE POWDERS



(57) Abstract: The invention relates to a powder-fluidizing and feeding device (1) for use with coating and spray forming nozzles and guns. The device includes novel provisions for controlling and feeding powder (10) from a hopper (2) to a vibrating bowl (8), for heating and vibrating powders (10) in the hopper (2) to dissipate agglomeration and clumping of the powder (10), and for metering powders (10) from a vibrating bowl (8) to the spray nozzles and guns using a feedback control derived from powder mass loss rate measurements. The device is particularly useful for feeding ultra-fine and nanoscale particles



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