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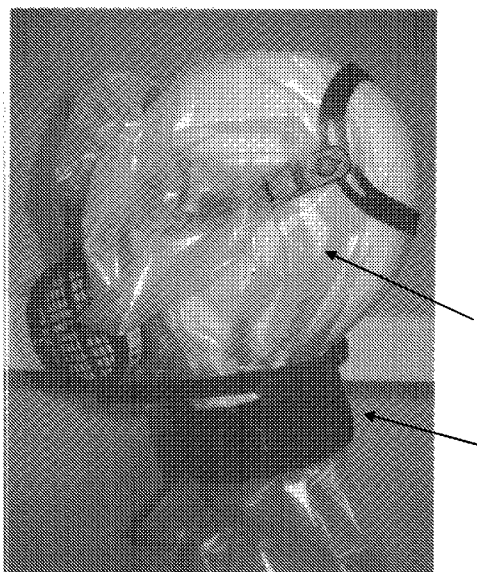
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(54) Title: PERSONAL PROTECTION DEVICE

Figure 3A Hood System of the Invention



1 Plastic

5 User
configurable

(57) Abstract: The invention relates to a low pressure drop personal protection device for providing protection against a range of toxic industrial chemicals and chemical warfare agents and capable of being worn by a wide range of users. The device comprises: a flexible polymeric hood in which the polymer is selected to be impermeable to the toxic challenge molecules; a neck seal for sealing the hood about the neck; a half mask for providing connection for a canister; and a low pressure drop canister system for providing chemical protection. The canister may comprise a resiliently flexible, closed cell foam and monolithic activated carbons, the foam having holes slightly smaller than the size of the monoliths so that flow through the canister is through the monoliths. The monoliths may be the result of partially curing a phenolic resin to a solid, comminuting the partially cured resin, extruding the comminuted resin, sintering the extruded resin so as to produce a form-stable sintered product and carbonising and activating the form-stable sintered product. They may be between 5 and 40mm diameter, preferably 15 to 30mm and 1-3 cm in length. Each monolith may have a square channel structure wherein the channel size is 100 -2000µm and the wall thickness may be 100 -2000µm with an open area of between about 30 and 60%. It may have a surface area of at least 700 m² /g, may be activated to

>30 wt% weight loss and may be impregnated with materials selected from metallic additives and triethylene diamine according to the anticipated challenge.