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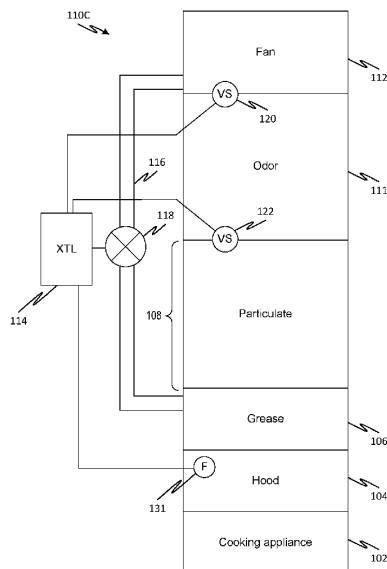


Fig. 3

(57) Abstract: A cooking fume mitigation system may have an exhaust hood configured to capture fumes from a cooking appliance, the exhaust hood conveying fumes to a particulate removal stage which conveys fumes to an odor removal stage. The system may also have an inlet volatile organic compound (VOC) sensor upstream of the odor removal stage and an outlet VOC sensor downstream of the odor removal stage. The odor removal stage may include a carbon filter or an ultraviolet light source. The particulate removal stage may include a pocket filter or an electrostatic precipitator filter. The system may also have a controller that receives signals from the inlet and outlet VOC sensors and uses the signals to generate data indicative of a remaining life of the carbon filter.

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