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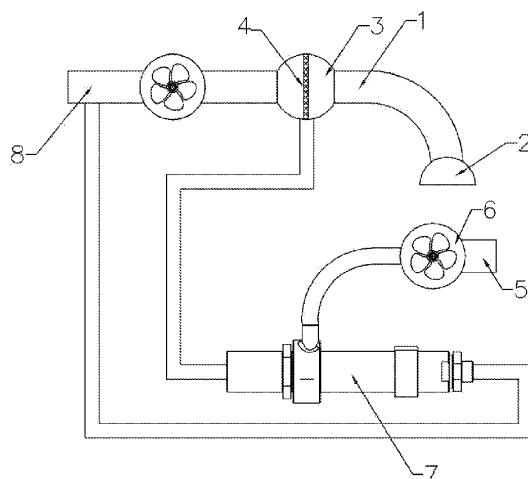
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(54) **Title:** ENVIRONMENT-FRIENDLY KITCHEN OIL FUME PURIFICATION AND EXTRACTION SYSTEM

(54) 发明名称: 厨房环保油烟净化抽气系统

[图1]



(57) **Abstract:** An environment-friendly kitchen oil fume purification and extraction system, comprising: an oil fume extraction system, which generates a negative pressure by means of a negative-pressure device, so as to suction oil fume in a kitchen; an oil fume cooling and condensing cavity, which is internally provided with a filter screen configured to cool and condense oil fume, wherein the oil fume cooling and condensing cavity is provided with a condensed-gas input port; and a ventilation device, which suctions air in a ventilation space, compresses the air by means of a compression device and feeds same into a vortex tube, wherein a low-temperature gas output end of the vortex tube is connected to the condensed-gas input port of the oil fume cooling and condensing cavity. By means of using the oil fume cooling and condensing cavity to reduce the internal temperature thereof by means of a low-temperature gas generated by the vortex tube, the filter screen is kept in a low-temperature environment; and the oil fume is cooled and collected when passing

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through the low-temperature filter screen, thereby greatly reducing the amount of oil fume discharged.

(57) 摘要: 一种厨房环保油烟净化抽气系统, 包括油烟抽气系统, 通过负压装置产生负压将厨房内的油烟吸入; 油烟冷却凝结腔, 腔内设置有用于将油烟冷却凝聚的滤网; 油烟冷却凝结腔设有冷凝气体输入口; 换气装置, 吸入换气空间的空气并由压缩装置压缩送入至涡流管, 涡流管的低温气体输出端连接至油烟冷却凝结腔的冷凝气体输入口; 通过使用油烟冷却凝结腔将其内部的温度通过涡流管所产生的低温气体进行降温, 将滤网保持在低温环境; 油烟通过低温的滤网时被冷却和收集, 藉此可以大大减少油烟排放量。