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(54) Title: METHOD AND APPARATUS FOR COOLING PYROLYSIS EFFLUENT

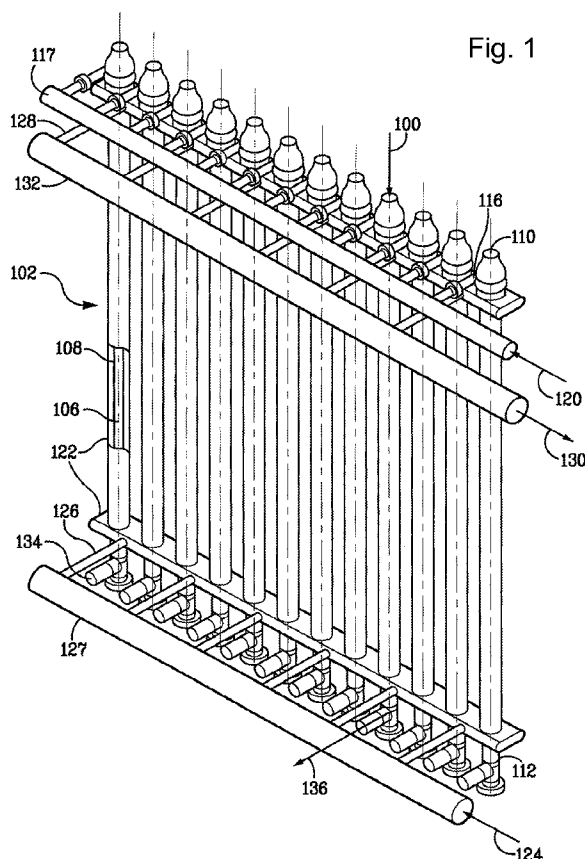


Fig. 1

(57) Abstract: A process and apparatus are provided for cooling gaseous effluent from a hydrocarbon pyrolysis furnace, the cooling conduit apparatus comprising: (i) an inner wall for contacting the effluent, the inner wall defining a bore extending a length of the cooling conduit, the inner wall including a perimeter opening along the bore; (ii) an outer wall external to the inner wall and substantially coaxial to the inner wall; (iii) a substantially annular cavity external to the inner wall and including at least a portion of the outer wall, the annular cavity fluidly and remotely connected to the perimeter opening, the annular cavity externally surrounding a perimeter of the inner wall, the annular cavity including at least a portion of the outer wall; and (iv) a peripheral channel extending around a perimeter of the inner wall, the peripheral channel providing a channel flow path that fluidly connects the annular cavity with the remotely connected perimeter opening along the perimeter of the inner wall.



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