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(54) Title: A ETHYLENE CRACKING FURNACE

(54) 发明名称: 一种乙烯裂解炉

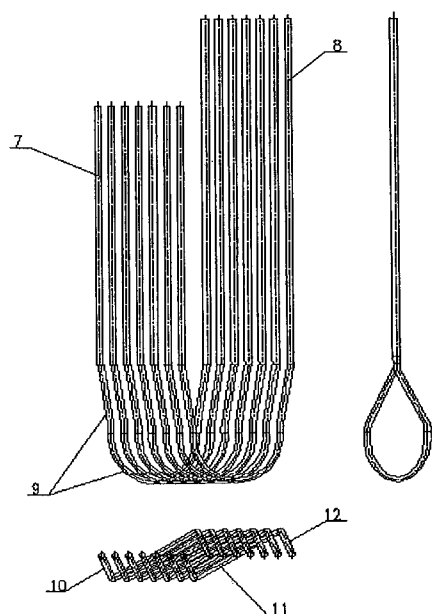


Fig. 2

(57) Abstract: Disclosed is an ethylene cracking furnace which comprises followings: high pressure vapor-bag (1), convection section (2), radiation section, several furnace tubes (14) which are vertically set out in the radiation section, burner (5), and instant-freezing boiler (6); each furnace tube of radiation section comprises one first stroke pipe (7), one second stroke pipe (8) and one connecting piece (9); the cracking material is fed in through the inlet of the first stroke pipe, and drawn out through the outlet of the second stroke pipe; said first stroke pipe (7) and second stroke pipe (8) are non-branched furnace tubes, and the central lines of each furnace tube are in same plane; said connecting piece (9) is a stereo structure which comprises inlet bend (10), return bend (11) and outlet bend (12); said inlet bend (10) and outlet bend (12) are situated on the both sides of the plane in which are the central lines of the first stroke pipe (7) and the second stroke pipe (8); the side project of said connecting pieces (9) is one symmetrical continual endless curve, the inner diameters of furnace tubes are changed at least once along the length direction of said furnace tube.

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