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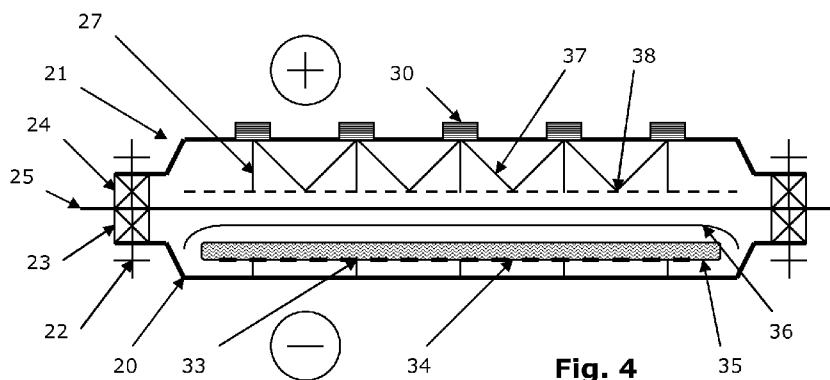


Fig. 4

(57) Abstract: An electrolysis cell provided with a separator, suitable for chlor-alkali electrolysis, has a planar flexible cathode kept in contact with the separator by an elastic conductive element pressed by a current distributor and an anode consisting of a punched sheet or mesh supporting the separator. The cell is suitable for being individually pre-assembled and used as elementary unit of a modular arrangement to form an electrolyser whose terminal cells only are connected to the electric power supply; the electrical continuity between adjacent cells is assured by conductive contact strips secured to the external anodic walls of the shells delimiting each cell. The stiffness of the cathode current distributor and of the anodic structure and the elasticity of the conductive element cooperate in maintaining a uniform cathode to separator contact with a homogeneous pressure distribution meanwhile ensuring a suitable mechanical load on the contact strips.