

Abstract

It is an object of the invention to specify an electrically heatable reactor for hydrogen cyanide production and the production of other nitriles that enables a differentiated temperature profile and requires no more than inexpensive standard components. The core of the inventive apparatus (0) is a chamber (1) made of gas-permeable, thermally insulating material that constitutes the actual reaction space. Electrical heating elements (5) project into the chamber (1), such that the chamber (1) can be heated from the inside by the heating elements (5). The electrical terminals of the heating elements are outside the reaction space but within the surrounding shell. Unlike in the industrially implemented BMA process, the heat is thus not transported into the reaction space from the outside, but rather generated in the reaction space. The heat is generated by conversion of electrical energy by means of the heating elements (5) by the principle of resistance heating. In order to ensure the gas-tightness of the apparatus (0), a shell (9) is provided, which surrounds the chamber (1) in a gas-tight manner.

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Figure 1 relating to the abstract