ABSTRACT

METHODS OF AND APPARATUS FOR FEEDING GRANULAR MATERIAL

The present invention provides an apparatus for feeding a granular catalyst to a destination such as a reactor at a constant feeding rate, thereby uniformly charging the catalyst material into the device. The granular catalyst is loaded into individual compartments (6) of a hopper (2) and is ejected at a discharge rate controlled by a gate (9). When a vibrator (4) is activated, the trough (3) is caused to vibrate in its obliquely upward direction and the granular material in the trough (3) is smoothly conveyed toward outlets of granular material passages 3a formed in the trough (3), and is introduced to reaction tubes of the reactor via sleeves 3e. Powdery waste of the granular catalyst produced by the vibration of the trough is removed by letting it fall through holes 3e made in the granular material passages 3a.

Fig. 1A