

Title (en)
DEVICES FOR OHMICALLY HEATING A FLUID

Title (de)
VORRICHTUNGEN ZUM OHMSCHEN ERWÄRMEN EINES FLUIDS

Title (fr)
DISPOSITIFS POUR CHAUFFER OHMIQUEMENT UN FLUIDE

Publication
EP 3967105 C0 20240501 (EN)

Application
EP 19728181 A 20190510

Priority
US 2019031752 W 20190510

Abstract (en)
[origin: WO2020231386A1] A heater for heating a conductive liquid includes a two-dimensional array of rod-like electrodes (22, 122, 322, 422, 522) extending parallel to one another, an electrical power supply having a plurality of poles, and power switches to connect different ones of the electrodes to different poles so that current flows between the poles through the liquid. The array desirably includes outer electrodes defining the boundary (24, 424) of the array and inner electrodes disposed within this boundary. The array may have regular or irregular spacings between the electrodes. The array can provide numerous different connection schemes to vary the electrical resistance between the poles and thus vary the heating rate. The array can be arranged to provide substantially equal currents through three poles of a three-phase power supply.

IPC 8 full level
H05B 3/60 (2006.01)

CPC (source: EP KR)
H05B 1/02 (2013.01 - KR); **H05B 3/03** (2013.01 - KR); **H05B 3/60** (2013.01 - EP KR); **H05B 2203/021** (2013.01 - EP KR)

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WO 2020231386 A1 20201119; AU 2019445705 A1 20220106; BR 112021022376 A2 20220104; CN 114009146 A 20220201;
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