

Title (en)
DEVICE AND METHOD FOR SIMULATING HEAT TRANSPORT PROCESSES

Title (de)
VORRICHTUNG UND VERFAHREN ZUR SIMULATION VON WÄRMETRANSPORTPROZESSEN

Title (fr)
DISPOSITIF ET PROCEDE DE SIMULATION DE PROCESSUS DE TRANSFERT THERMIQUE

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Abstract (en)
[origin: WO03056471A2] The invention relates to a device and a method for simulating heat transport processes. A body (2a, 2b, 2c) is divided into several calculation elements (21, 22). At least one thermal boundary condition parameter assigned to a first calculation element (21, 22) is detected based on the position of said first calculation element (21, 22) in relation to at least one other calculation element (24, 5a). The effect of heat transport generated by heat radiation or forced convection in relation to the first calculation element (21, 22) is estimated by adjusting at least one convection parameter (TU, alpha), which is generally used to calculate heat transport generated by free convection and is based on a functional interrelationship between the temperature and heat transport, on the basis of the thermal boundary condition parameters.

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