

Title (en)  
VIRTUAL TEMPERATURE MEASURING POINT

Title (de)  
VIRTUELLE TEMPERATURMESSSTELLE

Title (fr)  
POINT DE MESURE DE TEMPERATURE VIRTUELLE

Publication  
**EP 1938067 A1 20080702 (DE)**

Application  
**EP 06793810 A 20060925**

Priority  

- EP 2006066704 W 20060925
- EP 05022820 A 20051019
- EP 06793810 A 20060925

Abstract (en)  
[origin: EP1777505A1] Mathematical model for determination of non-linear temperature profiles for thick wall engineering components e.g. high temperature fluid transfer pipes, turbine shafts considers the wall as a composite of parallel layers each with non-steady state in- and out-heat flows, calculates a mean temperature for each layer from an instantaneous heat balance, and from integration of these produces values for the wall temperature at given depths. The technique considers a generally cylindrical thick wall as comprising a series of concentric layers e.g. 1-10, where layer 1 is in contact with a process fluid. The system calculates heat transfer coefficients and then sequentially computes mean temperatures for the layers, by repeated application of the algorithms.

IPC 8 full level  
**G01K 17/20** (2006.01)

CPC (source: EP KR US)  
**F27D 21/0014** (2013.01 - EP US); **G01K 7/42** (2013.01 - EP US); **G01K 17/20** (2013.01 - EP KR US); **G01K 19/00** (2013.01 - KR)

Citation (search report)  
See references of WO 2007045546A1

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RS

DOCDB simple family (publication)  
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