

Title (en)
INTEGRATED LIQUID COOLING SYSTEM

Title (de)
INTEGRIERTES FLÜSSIGKEITSKÜHLSYSTEM

Title (fr)
SYSTÈME INTÉGRÉ DE REFROIDISSEMENT PAR LIQUIDE

Publication
EP 2633377 A1 20130904 (EN)

Application
EP 10776016 A 20101028

Priority
US 2010054457 W 20101028

Abstract (en)
[origin: WO2012057763A1] A liquid cooling system includes a monolith that is configured to be coupled to a motherboard of the computer. The monolith may be monolithic planar body having a first surface and an opposite second surface, and may include a heat absorption region and a heat dissipation region. The heat absorption region may be at least one location on the monolith that is configured to be in thermal contact with a heat generating component of the motherboard, and the heat dissipation region may be at least one location on the monolith where a liquid-to-air heat exchanger is attached to the monolith. The liquid cooling system may also include a channel extending on the second surface of the monolith and a pump that is configured to circulate the liquid coolant through the channel. The channel may be a trench on the second surface of the monolith that is configured to circulate a liquid coolant between the heat absorption region and the heat dissipation region.

IPC 8 full level
G06F 1/20 (2006.01)

CPC (source: EP)
G06F 1/203 (2013.01); **G06F 2200/201** (2013.01)

Citation (search report)
See references of WO 2012057763A1

Citation (examination)
US 5420753 A 19950530 - AKAMATSU SHINYA [JP], et al

Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)
WO 2012057763 A1 20120503; EP 2633377 A1 20130904

DOCDB simple family (application)
US 2010054457 W 20101028; EP 10776016 A 20101028