

Title (en)
LIQUID IMMERSION COOLING PLATFORM

Title (de)
KÜHLPLATTFORM MIT FLÜSSIGKEITSIMMERSION

Title (fr)
PLATE-FORME DE REFROIDISSEMENT PAR IMMERSION DANS UN LIQUIDE

Publication
EP 3881658 A4 20220914 (EN)

Application
EP 19883541 A 20191111

Priority

- US 201862768633 P 20181116
- US 201916283181 A 20190222
- US 201962815682 P 20190308
- US 201962875222 P 20190717
- US 201962897457 P 20190909
- US 201916576363 A 20190919
- US 201916576285 A 20190919
- US 201916576405 A 20190919
- US 201916576191 A 20190919
- US 2019051924 W 20190919
- US 201916576309 A 20190919
- US 201916576239 A 20190919
- US 2019060759 W 20191111

Abstract (en)
[origin: WO2020102090A1] A two-phase liquid immersion cooling system is described in which heat generating computer components cause a dielectric fluid in its liquid phase to vaporize. The dielectric vapor is then condensed back into a liquid phase and used to cool the computer components. Using a pressure controlled vessel and pressure controller, the disclosed system may be operated at less than ambient pressure. By controlling the pressure at which the system operates, the user may influence the temperature at which the dielectric fluid vaporizes and thereby achieve increased performance from a given computer component. Utilizing robotic arms and slot-in computing components, a self-healing computing system may be created. A two-phase liquid immersion cooling system is described in which heat generating computer components cause a dielectric fluid in its liquid phase to vaporize. The dielectric vapor is then condensed back into a liquid phase and used to cool the computer components. Using a pressure controlled vessel and pressure controller, the disclosed system may be operated at less than ambient pressure. By controlling the pressure at which the system operates, the user may influence the temperature at which the dielectric fluid vaporizes and thereby achieve increased performance from a given computer component. Utilizing robotic arms and slot-in computing components, a self-healing computing system may be created.

IPC 8 full level
H05K 7/20 (2006.01); **G06F 1/18** (2006.01); **G06F 1/20** (2006.01)

CPC (source: EP KR)
G06F 1/20 (2013.01 - EP KR); **G06F 1/206** (2013.01 - EP); **H05K 7/203** (2013.01 - EP KR); **H05K 7/20381** (2013.01 - EP); **H05K 7/20818** (2013.01 - EP); **G06F 2200/201** (2013.01 - EP)

Citation (search report)

- [X] US 2014218859 A1 20140807 - SHELNUTT AUSTIN MICHAEL [US], et al
- [A] WO 2018163180 A1 20180913 - ZUTA CORE LTD [IL]
- See references of WO 2020102090A1

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 2020102090 A1 20200522; AU 2019378713 A1 20210603; CA 3113668 A1 20200522; CA 3128868 A1 20200522; CN 113647204 A 20211112; EP 3881658 A1 20210922; EP 3881658 A4 20220914; JP 2022504024 A 20220113; KR 20210119384 A 20211005; MX 2021003176 A 20210811

DOCDB simple family (application)
US 2019060759 W 20191111; AU 2019378713 A 20191111; CA 3113668 A 20191111; CA 3128868 A 20191111; CN 201980089348 A 20191111; EP 19883541 A 20191111; JP 2021516360 A 20191111; KR 20217018317 A 20191111; MX 2021003176 A 20191111