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**(71) Applicant(s):**

ABB SCHWEIZ AG [CH/CH]; Brown Boveri Strasse 6 5400 Baden (CH) (*for all designated states*)

**(72) Inventor(s):**

GARDONI, Irene; Bodenächerstrasse 35 5417 Untersiggenthal (CH)

KIPFER, Manfred; Lehmgruebstrasse 3 8733 Eschenbach (CH)

DE-CANDIDO, Erika; Sonnenbergstrasse 51 5408 Ennetbaden (CH)

**(74) Agent(s):**

SAVELA, Reino; ABB AB, Intellectual Property Forskargränd 7 721 78 Västerås (SE)

**(54) Title (EN):** LIQUID COOLING SYSTEM AND METHOD

**(54) Title (FR):** SYSTÈME ET PROCÉDÉ DE REFROIDISSEMENT DE LIQUIDE

**(57) Abstract:**

**(EN):** Liquid cooling system (10) for cooling at least one electrical component (14), the liquid cooling system (10) comprising a cooling circuit (12) having at least one supply branch (20) for supplying liquid coolant to an electrical component (14); and at least one deaeration line (28) to provide a connection between a high point (32) and a junction point (34) of the cooling circuit (12) to bypass a part of the cooling circuit (12); wherein the pressure of the liquid coolant is lower in the junction point (34) than in the high point (32) during circulation of the liquid coolant in the liquid cooling system (10).

**(FR):** La présente invention concerne un système de refroidissement de liquide (10) destiné à refroidir au moins un composant électrique (14), le système de refroidissement de liquide (10) comprenant un circuit de refroidissement (12) ayant au moins une section d'alimentation (20) destinée à fournir un liquide de refroidissement à un composant électrique (14); et au moins une ligne de désaération (28) destinée à fournir une connexion entre un point haut (32) et un point de jonction (34) du circuit de refroidissement (12) pour contourner une partie du circuit de refroidissement (12); la pression du liquide de refroidissement étant inférieure dans le point de jonction (34) à celle dans le point haut (32) pendant la circulation du liquide de refroidissement dans le système de refroidissement de liquide (10).

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**Declarations:**

Declaration of inventorship (Rules 4.17(iv) and 51bis.1(a)(iv)) for the purposes of the designation of the United States of America