

Title (en)

SYSTEMS AND METHODS FOR REDUCING ENERGY CONSUMPTION OF A CHILLED WATER DISTRIBUTION SYSTEM

Title (de)

SYSTEME UND VERFAHREN ZUR REDUZIERUNG DES ENERGIEVERBRAUCHS EINES SYSTEMS ZUR VERTEILUNG VON GEKÜHLTEM WASSER

Title (fr)

SYSTÈMES ET PROCÉDÉS DE RÉDUCTION DE CONSOMMATION D'ÉNERGIE D'UN SYSTÈME DE DISTRIBUTION D'EAU RÉFRIGÉRÉE

Publication

EP 3673218 A1 20200701 (EN)

Application

EP 18847766 A 20180821

Priority

- US 201715682320 A 20170821
- US 2018047225 W 20180821

Abstract (en)

[origin: WO2019040435A1] A chilled water distribution system includes a chilled water loop in fluid communication with a plurality of buildings and also in fluid communication with a plurality of chiller stations. A monitoring and control system communicates with one of the chiller stations, hereinafter referred to as a "controlled" chiller station because it is configured with one or more variable frequency drives that are controlled by the monitoring and control system to modulate the speed of at least one chiller station component such as, but not limited to, a pump or a fan. By way of this modulation process, a differential pressure of the chilled water loop may be maintained in a "sweet spot" so as to optimize chiller station output while minimizing chiller station energy consumption.

IPC 8 full level

F25D 17/02 (2006.01); **F24F 11/00** (2018.01); **F25B 25/00** (2006.01); **F25B 49/02** (2006.01)

CPC (source: EP)

F24F 11/46 (2017.12); **F25D 17/02** (2013.01); **F25B 2400/06** (2013.01); **F25B 2600/13** (2013.01); **Y02B 30/70** (2013.01)

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

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

WO 2019040435 A1 20190228; CN 111094882 A 20200501; EP 3673218 A1 20200701; EP 3673218 A4 20210127

DOCDB simple family (application)

US 2018047225 W 20180821; CN 201880053806 A 20180821; EP 18847766 A 20180821