

Title (en)
Pumping assembly for a drinks temperature management system

Title (de)
Pumpenanordnung für Getränketemperaturverwaltungsanlage

Title (fr)
Ensemble de pompage pour système de gestion de la température de boissons

Publication
EP 1035389 A2 20000913 (EN)

Application
EP 00302018 A 20000313

Priority
• GB 9905664 A 19990312
• GB 9927296 A 19991119

Abstract (en)
The pumping assembly of Figure 1, which is used for a drink temperature management system comprises an electric motor 2 including a vertical drive shaft 3, three centrifugal fluid pumps 5, 6, 7 and a vaned agitator 8. The electric motor 2 is located above a chilled water reservoir 4. The drive shaft 3 extends downwardly in a direction away from the motor through the top of the reservoir 4 and into chilled water 10 contained by the reservoir 4. The vaned agitator 8 is disposed at the lowermost distal end of the drive shaft 3. The three fluid pumps 5, 6, 7 are directly coupled to the drive shaft 3 and are disposed vertically above the agitator 8. The pumps 5, 6, 7 are submerged with the chilled water 10. The pumps 5, 6, 7 each comprises an impeller 12 contained within a disc shaped hollow pump casing 14. Each pump casing 14 is formed with a fluid input port 16 and a fluid output nozzle 18 extending axially from the drive shaft 3. The pump 5 is held separated from pump 6 by a set of rods 9 and pump 6 is held separated from pump 7 by a set of rods 9'. Connected to the respective output nozzles 18 are cooling tubes 20, 21, 22. The respective cooling tubes 20, 21, 22 are fed to three separate drink python bundles. In use the motor 2 runs continuously and rotates the drive shaft 3 which in turn rotates the three impellers 12 and the agitator 8. Each impeller 12 draws chilled water 10 from the reservoir 4 through the input ports 16. The chilled water exits the respective pumps 14 through the output nozzles 18. The chilled water is circulated through the drinks pythons via the cooling tubes 20, 21, 22 and then returned to the reservoir 4. <IMAGE>

IPC 1-7
F25D 17/02; **F04D 13/14**

IPC 8 full level
B67D 1/08 (2006.01); **B67D 1/10** (2006.01); **F04D 13/06** (2006.01); **F04D 13/14** (2006.01)

CPC (source: EP)
B67D 1/0867 (2013.01); **B67D 1/10** (2013.01); **F04D 13/06** (2013.01); **F04D 13/14** (2013.01)

Cited by
CN100387848C; US8721267B2; WO2011150107A1

Designated contracting state (EPC)
DE FR GB IE IT

DOCDB simple family (publication)
EP 1035389 A2 20000913; **EP 1035389 A3 20011004**

DOCDB simple family (application)
EP 00302018 A 20000313