Title (en)

Automatic draining apparatus and automatic draining system using the same

Title (de)

Automatisches Entwässerungsgerät und dieses verwendende automatische Entwässerungsanlage

Title (fr)

Appareil automatique d'évacuation et système automatique d'écoulement l'utilisant

Publication

EP 0699877 A3 19961204 (EN)

Application

EP 95303128 A 19950509

Priority

- JP 22735494 A 19940829
- JP 28262994 A 19941021

Abstract (en)

[origin: EP0699877A2] An automatic draining apparatus comprises a float (35) which is floating on the liquid surface in a receiving tank (25) receiving liquid from a liquid source (7), a suction nozzle (28) having a liquid inlet port (29) located in liquid in said receiving tank (25) and connected to a vacuum tank (3) evacuated so as to keep the inside thereof at a specified degree of vacuum, a liquid inlet port open-to-close valve (34) being attracted toward said liquid inlet port (29) according to downward movement of said float (35) by a lowering of the liquid level in said receiving tank (25), and guide means (37, 47, 51 and 57) which regulate the path of movement of said liquid inlet port open-to-close valve (34) so that said liquid inlet port (29) is opened or closed according to upward and downward movement of said float 35. In an alternative apparatus, liquid is evacuated from a tank (63) under the pressure of air being introduced into the tank (63) from an air supply source (70), and electrical or electromagnetic valves (65, 66, 72, 74, 91) controlling the communication of the tank (63) with a liquid source (7), air supply source (70), drain outlet passage (67) and vent (73) are controlled according to the level of liquid in the tank detected by level detecting means (66). <MATH>

IPC 1-7

F24F 13/22; F25D 21/14

IPC 8 full level

F24F 13/22 (2006.01); **F25D 21/14** (2006.01)

CPC (source: EP KR)

B67D 99/00 (2013.01 - KR); **F24F 13/22** (2013.01 - EP); **F25D 21/14** (2013.01 - EP); F25D 2321/146 (2013.01 - EP)

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