

Title (en)

MULTI-NOZZLE ROTARY SPRINKLER

Title (de)

ROTIERENDE SPRINKLERANLAGE MIT MEHREREN DÜSEN

Title (fr)

ARROSEUR ROTATIF À PLUSIEURS BUSES

Publication

EP 2595756 A2 20130529 (EN)

Application

EP 11738361 A 20110718

Priority

- US 36560010 P 20100719
- US 2011044337 W 20110718

Abstract (en)

[origin: WO2012012318A2] A rotary sprinkler (100) comprises first, second and third nozzles (104A, 104B, 104C). The first nozzle comprises a first nozzle fluid pathway (122A) including a central axis (140), an inlet (120), an outlet (124), a first length (154A) measured from the inlet to the outlet along the central axis, and a first interior diameter (142A) at the outlet. The second nozzle comprises a second nozzle fluid pathway (122B) including a central axis (140), an inlet (120), an outlet (124), a second length (154B) measured from the inlet to the outlet along the central axis, and a second interior diameter (142B) at the outlet. The third nozzle comprises a third nozzle fluid pathway (122C) including a central axis (140), an inlet (120), an outlet (124), a third length (154C) measured from the inlet to the outlet along the central axis, and a third interior diameter (142C) at the outlet. In some embodiments, the first interior diameter is greater than the second interior diameter, and the second interior diameter is greater than the third interior diameter. In some embodiments, the first length is greater than the second length, and the second length is greater than the third length. A sprinkler system comprises a plurality of rotary sprinklers (100), an irrigation controller (306) and a system controller (274). The rotary sprinklers each comprise a water supply inlet (108), a nozzle head (102) supported by a base (106), and a plurality of nozzles supported by the nozzle head. The nozzles each comprise a fluid pathway (122) having an inlet (120) and an outlet (124). A fluid flow path (114, 116) connects the water supply inlet to the inlets of the nozzles. In some embodiments, the sprinklers each comprise at least one valve (160) configured to control the flow of water through the fluid flow path. In some embodiments, the irrigation controller comprises memory (307) containing zone program instructions, and a processor (308) configured to execute the zone program instructions and generate zone valve signals (310) based on the zone program instructions. In some embodiments, the system controller comprises memory (278) containing sprinkler program instructions, and a processor (276) configured to execute the sprinkler program instructions and communicate control signals to the at least one valve of each of the rotary sprinklers based on the sprinkler program instructions and the zone valve signals.

IPC 8 full level

B05B 1/14 (2006.01); **A01G 25/00** (2006.01); **A01M 7/00** (2006.01); **B05B 1/30** (2006.01); **B05B 3/02** (2006.01); **B05B 3/04** (2006.01);
B05B 12/08 (2006.01); **B05B 12/12** (2006.01)

CPC (source: EP US)

B05B 1/14 (2013.01 - EP); **B05B 1/30** (2013.01 - US); **B05B 1/3026** (2013.01 - EP); **B05B 3/02** (2013.01 - EP); **B05B 12/04** (2013.01 - EP);
B05B 12/085 (2013.01 - EP); **B05B 15/74** (2018.02 - EP)

Citation (examination)

- US 3149784 A 19640922 - SKIDGEL JOHN R
- WO 9702897 A1 19970130 - GILMOUR INC [US]
- US 6332581 B1 20011225 - CHIN DOUGLAS E [US], et al
- US 5598977 A 19970204 - LEMME CHARLES D [US]
- US 3452930 A 19690701 - KARBO RICHARD S
- EP 0301367 A2 19890201 - GARDENA KRESS & KASTNER GMBH
- US 2884202 A 19590428 - SMITH LLOYD B

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 2012012318 A2 20120126; **WO 2012012318 A3 20120510**; AU 2011279849 A1 20130221; EP 2595756 A2 20130529;
EP 2595756 B1 20210901

DOCDB simple family (application)

US 2011044337 W 20110718; AU 2011279849 A 20110718; EP 11738361 A 20110718