

Title (en)

DIFFUSER FOR UNDERGROUND IRRIGATION OF TREES, SHRUBS, DECORATIVE PLANTS AND VEGETABLE GARDENS

Title (de)

DIFFUSOR FÜR EIN UNTERIRDISCHES BEWÄSSERUNGSSYSTEM VON BÄUME, STRÄUCHERN, ZIERPFLANZEN UND GEMÜSE

Title (fr)

DIFFUSEUR POUR IRRIGATION SOUTERRAINE D'ARBRES, D'ARBUSTES, DES PLANTES ORNEMENTALES ET DES CULTURES MARAÎCHERES

Publication

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Application

EP 03781273 A 20031205

Priority

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Abstract (en)

[origin: WO2004060047A2] The invention concerns an apparatus in different shapes and sizes for underground irrigation of trees and fruit and forest trees as well as for vegetable gardens and potted plants, plants in containers, vases and boxes. The diffusers for trees and shrubs, fruit and forest trees are installed and buried in holes or ditches (1.20) around the trees. The irrigation water filled in the tanks or derived from an irrigation network or an external tank, passes through the holes (1.6 and 1.18) of the lower part (1.2, or 1.4) of the diffuser and soaks up the porous plate (1.7 or 1.19), then infiltrates into the underlying soil. Said infiltration is carried out at a depth of about 80 cm (or more) away from all evaporation. The reservoir diffuser for decorative plants is set to cover the soil of a specially designed container. The irrigation is carried out by filling up the containers with elements of the reservoir diffuser through one of the orifices (2.4) of the lid (2.2). The water filled up in said containers subsequently infiltrates into the substrate located underneath passing through the containers (2.3) and through the porous plate (2.7). Additionally to its function of diffusing water into the substrate located underneath, the reservoir diffuser constitutes a protecting screen for the humidified substrate against the loss of water by direct or capillary evaporation. The diffusers for vegetable gardens in open field or underneath shelters are buried leaving exposed only about 2 cm above the surface of the ground. The water derived from the nozzle (3.10) via a hose proceeds on its way towards the soil located beneath the diffuser, passing through the nozzle (3.8), the throat (3.6) and its lid (3.2) and the porous plate (3.3). The reservoir diffusers constitute a protective screen for the humidified substrate against loss of water and direct or capillary evaporation.

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IPC 8 full level

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