AGRICULTURAL COVERING

Patent number: US2015064415

Date of publication: 2015-03-05

Applicant(s): BEAULIEU TECHNICAL TEXTILES (BE)

Abstract

The present invention is directed to an agricultural covering in form of a woven plastic fabric (10) that includes an area (25) having a lower density of warp threads (12) per unit width compared to the adjacent areas (24, 26) adapted for effortless and effective threading of a securing element (30) through the fabric (10) to encircle a plurality of weft threads (14). By providing multiple reinforced areas (28) spaced in machine direction (120) and extending in a cross-machine direction (140) of the fabric (10), the tear propagation resistance, and/or the weathering resistance and/or the tensile strength of the fabric (10) is improved. By applying a plastic coating (18) such that a strip (22) adjacent to each of the border edges (16) is left uncoated and by attaching the securing element (30) to the fabric (10) in the uncoated strip (22), the breaking load is increased.
PROTECTION CONTAINER FOR FLOWER BULBS

Patent number: DE102014100343

Date of publication: 2015-02-19

Applicant(s): BERNER (DE)

Abstract

The Protection Container (1) for Flower Bulbs to the Protection from Harming Rodents, Moles and too much Wetness, a Hollow Body (18) with a firm Coat Wall (5) covered, whereby the Coat Wall (5) Coat Wall Openings (6) exhibits, is characterized by the fact that at the Inside of the Hollow Body (18) to the central Adherence of differently large Flower Bulbs Mounting Plates (8) is arranged, which are flexibly backspringily with springs trained.
WOVEN GROUND COVER MATERIALS

Patent number: WO2015020543

Date of publication: 2015-02-12

Applicant(s): EXTENDAY

Abstract

A ground cover sheet material for use in agriculture is described. The sheet material has a greater length than width and is woven from at least two different types of tapes. The two different types of tapes have different reflecting, absorbing or transmission properties. Each type of tape forms at least 5% or 10% of the surface area of the ground cover material.
FLEXIBLE FILM, ASSEMBLY OF A STRUCTURE

Patent number: WO2015016713

Date of publication: 2015-02-05

Applicant(s): VALK SYSTEMEN (NL)

Abstract

A flexible film comprises a transparent support layer and a layer stack having one or more transparent layers, wherein at least one layer of the layer stack is divided into segments in the longitudinal direction. Adjacent segments of the at least one layer are separated from one another in the longitudinal direction by an intermediate space, which intermediate space is free of the at least one segmented layer. The invention further relates to an assembly of a support structure and the flexible film, wherein the support structure comprises a number of structural parts in the longitudinal direction substantially at right angles thereto; a support distance is provided between each pair of adjacent structural parts; the flexible film is stretched in the longitudinal direction in the vicinity of the structural parts in such a way that the longitudinal direction of the support layer coincides with the longitudinal direction of the support structure, and a position of a structural part substantially coincides with the position of an intermediate space on the support layer.

Fig. 1
SOLAR ENERGY FUNELING USING THERMOPLASTICS

Patent number: EP2824138

Date of publication: 2015-01-14

Applicant(s): SABIC (Saudi)

Abstract

Disclosed is a wavelength-conversion material, and methods for its use, that includes an organic fluorescent dye and a polymeric matrix, wherein the organic fluorescent dye is solubilized in the polymeric matrix, and wherein the polymeric matrix is capable of absorbing light comprising a wavelength of 500 to 700 nm and emitting the absorbed light at a wavelength of greater than 550 to 800 nm.
GREENHOUSE ROOFING HAVING TEMPERATURE DEPENDENT RADIATION TRANSPARENCY

Patent number: WO2014206565

Date of publication: 2014-12-31

Applicant(s): TROPOTHERM (DE)

Abstract

In plant cultivation, it is common in many cases to grow certain crops under film covers, in greenhouses (100), or under other roofings (200). Depending on the climate zone and crop, this can be used for example to supply heat by retaining the sunlight or by means of additional heating. The invention relates to a plant cultivation roofing (10) made of film material or plate material having temperature-dependent radiation transparency, wherein a plastic layer in or on a plate or at least one film layer having temperature-dependent radiation transparency provides a gradual or a two-step or multi-step transparency reduction for rising temperatures in a temperature range from 20 °C.

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AA PAR-Spektrum

BB IR-Spektrum

15-25 %

OFF - Modus

CC

EE diffus
direkt FF

50-60 %

25-30 %

40-75 %

15 %

GG Referenzfolie

EE diffus
direkt FF

38 %

47 %

60 %

70 %

HH Referenzfolie gekalkt

diffus
direkt

24 %

6 %

1 %

AA PAR spectrum
BB IR spectrum
CC OFF mode
DD ON mode
EE Diffuse
FF Direct
GG Reference film
HH Lined reference film

Fig. 3
SYSTEM FOR GROWING PRODUCE IN GREENHOUSES

Patent number: WO2015051470

Date of publication: 2015-04-16

Applicant(s): GEA FARM TECHNOLOGIES (CA)

Abstract

A system (1) for growing produce (3) in greenhouses. The system (1) includes at least one greenhouse (5) for housing the produce (3) to be grown, the at least one greenhouse (5) being positioned, shaped and sized for receiving direct sun rays (7d). The system (1) also includes at least one reflector assembly (11) proximate to the at least one greenhouse (5) and being positioned, shaped and sized for redirecting indirect sun rays (7i) by-passing the at least one greenhouse (5), towards at least one targeted area (13) within the at least one greenhouse (5), so as to provide said at least one greenhouse (5) with assisted complementary solar energy.
MINI GREENHOUSE HAVING AN AUTOMATED TEMPERATURE CONTROL

Patent number: US2015096225

Date of publication: 2015-04-09

Applicant(s): GERVAIS (US)

Abstract

A greenhouse comprises a body, a lid, an actuator, a temperature sensor and a controller. The body has a front wall, a back wall and two opposite lateral walls. The actuator is connected to the body and is in contact with the lid. The temperature sensor is connected to the controller and is located so as to read a temperature inside the body. The controller is electrically connected to the actuator and is electrically connected to the sensor so as to receive a temperature signal from the sensor. The controller is both operative to activate the actuator so as to open the lid when the temperature sensor reads a first temperature inside the body and to activate the actuator so as to close the lid when the temperature sensor reads a second temperature inside the body.