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(12) **United States Plant Patent**
Wain

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(54) **CHRYSANTHEMUM PLANT NAMED**
'DOMSUNACI'

(50) Latin Name: *Chrysanthemum X morifolium*
Varietal Denomination: **Domsunaci**

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patent is extended or adjusted under 35
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(21) Appl. No.: **16/350,600**

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(65) **Prior Publication Data**

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8, 2017.

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A01H 5/02 (2018.01)
A01H 6/14 (2018.01)

(52) **U.S. Cl.**
USPC **Plt./290**
CPC *A01H 6/1424* (2018.05)

(58) **Field of Classification Search**
USPC Plt./290
See application file for complete search history.

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(57) **ABSTRACT**

A new and distinct cultivar of *Chrysanthemum* plant named
'Domsunaci', characterized by its upright to outwardly
spreading and uniformly and broadly mounded plant habit;
moderately vigorous growth habit; freely branching habit;
dense and full plant form; uniform and freely flowering
habit; relatively large decorative-type inflorescences with
orange red-colored ray florets; early season flowering habit,
grown under natural season conditions, plants begin flow-
ering in mid-August in the United Kingdom; and good
garden performance.

1 Drawing Sheet

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Botanical designation: *Chrysanthemum X morifolium*.
Cultivar denomination: 'DOMSUNACI'.

**CROSS-REFERENCED TO CLOSELY-RELATED
APPLICATIONS**

Title: *Chrysanthemum* Plant Named 'Domsuchir'
Applicant: Peter Wain
Filed: Concurrently with this application

BACKGROUND OF THE INVENTION

The present invention relates to a new and distinct *Chry-*
santhemum plant, botanically known as *Chrysanthemum X*
morifolium, commercially grown as a garden *Chrysanthe-*
mum plant, referred to as code number 66567 in U.S.
Provisional Patent Application Ser. No. 62/708,405 and
hereinafter referred to by the name 'Domsunaci'.

The new *Chrysanthemum* plant is a product of a planned
breeding program conducted by the Inventor in Fareham,
Hampshire, United Kingdom. The objective of the breeding
program is to create new garden *Chrysanthemum* plants with
numerous attractive inflorescences.

The new *Chrysanthemum* plant originated from a cross-
pollination made in January, 2013 by the Inventor in Fare-
ham, Hampshire, United Kingdom of a proprietary selection
of *Chrysanthemum X morifolium* identified as code number
802483, not patented, as the female, or seed, parent with a
proprietary selection of *Chrysanthemum X morifolium* iden-
tified as code number 802167, not patented, as the male, or
pollen, parent. The new *Chrysanthemum* plant was discov-
ered and selected by the Inventor as a single flowering plant

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from within the progeny of the stated cross-pollination in a
controlled greenhouse environment in Fareham, Hampshire,
United Kingdom in September, 2013.

Asexual reproduction of the new *Chrysanthemum* plant
by terminal vegetative cuttings was first conducted in Fare-
ham, Hampshire, United Kingdom in December, 2013.
Asexual reproduction by terminal vegetative cuttings has
shown that the unique features of this new *Chrysanthemum*
plant are stable and reproduced true to type in successive
generations.

SUMMARY OF THE INVENTION

Plants of the new *Chrysanthemum* have not been observed
under all possible combinations of environmental conditions
and cultural practices. The phenotype may vary somewhat
with variations in environmental conditions such as tem-
perature, daylength and light intensity, without, however,
any variance in genotype.

The following traits have been repeatedly observed and
are determined to be the unique characteristics of 'Domsu-
naci'. These characteristics in combination distinguish
'Domsunaci' as a new and distinct *Chrysanthemum* plant:

1. Upright to outwardly spreading and uniformly and
broadly mounded plant habit.
2. Moderately vigorous growth habit.
3. Freely branching habit; dense and full plant form.
4. Uniform and freely flowering habit.
5. Relatively large decorative-type inflorescences with
orange red-colored ray florets.

6. Early season flowering habit, grown under natural season conditions, plants begin flowering in mid-August in the United Kingdom.
7. Good garden performance.

Plants of the new *Chrysanthemum* can be compared to plants of the female parent selection. Plants of the new *Chrysanthemum* differ primarily from plants of the female parent selection in the following characteristics:

1. Plants of the new *Chrysanthemum* are larger than plants of the female parent selection.
2. Plants of the new *Chrysanthemum* have larger inflorescences than plants of the female parent selection.

Plants of the new *Chrysanthemum* can be compared to plants of the male parent selection. Plants of the new *Chrysanthemum* differ primarily from plants of the male parent selection in the following characteristics:

1. Plants of the new *Chrysanthemum* flower earlier than plants of the male parent selection.
2. Plants of the new *Chrysanthemum* and the male parent selection differ in inflorescence form as plants of the new *Chrysanthemum* have decorative inflorescences whereas plants of the male parent selection have semi-decorative inflorescences.
3. Plants of the new *Chrysanthemum* and the male parent selection differ in ray floret color as plants of the new *Chrysanthemum* have inflorescences with orange red-colored ray florets whereas plants of the male parent selection have inflorescences with red purple-colored ray florets.

Plants of the new *Chrysanthemum* can also be compared to plants of *Chrysanthemum X morifolium* 'Domsuchir', disclosed in U.S. Plant patent application Ser. No. 16/350,592. In side-by-side comparisons, plants of the new *Chrysanthemum* differ primarily from plants of 'Domsuchir' in the following characteristics:

1. Plants of the new *Chrysanthemum* have larger inflorescences than plants of 'Domsuchir'.
2. Plants of the new *Chrysanthemum* and 'Domsuchir' differ in ray floret color as plants of the new *Chrysanthemum* have inflorescences with orange red-colored ray florets whereas plants of 'Domsuchir' have inflorescences with dark red-colored ray florets.

Plants of the new *Chrysanthemum* can also be compared to plants of *Chrysanthemum X morifolium* 'Fichrydayor', disclosed in U.S. Plant Pat. No. 30,498. In side-by-side comparisons, plants of the new *Chrysanthemum* differ primarily from plants of 'Fichrydayor' in the following characteristics:

1. Plants of the new *Chrysanthemum* flower earlier than plants of 'Fichrydayor'.
2. Plants of the new *Chrysanthemum* have larger inflorescences than plants of 'Fichrydayor'.
3. Plants of the new *Chrysanthemum* and 'Fichrydayor' differ in ray floret color as plants of the new *Chrysanthemum* have inflorescences with orange red-colored ray florets whereas plants of 'Fichrydayor' have inflorescences with bronze orange-colored ray florets.

BRIEF DESCRIPTION OF THE PHOTOGRAPH

The accompanying photograph illustrates the overall appearance of the new *Chrysanthemum* plant showing the colors as true as it is reasonably possible to obtain in colored reproductions of this type. Colors in the photograph may differ slightly from the color values cited in the detailed

botanical description which accurately describe the colors of the new *Chrysanthemum* plant. The photograph is a top perspective view of a typical flowering plant of 'Domsunaci' grown in a container.

DETAILED BOTANICAL DESCRIPTION

The aforementioned photograph and following observations and measurements describe plants grown during the winter in 19-cm containers in a glass-covered greenhouse in Fareham, Hampshire, United Kingdom and under cultural practices typical of commercial garden *Chrysanthemum* production. During the production of the plants, day and night temperatures ranged from 17° C. to 21° C. and light levels averaged 6,000 lux. Plants were grown under long day/short night conditions for about seven weeks (including propagation period) and then grown under short day/long night conditions to induce inflorescence initiation and development. Plants were 14 weeks old when the photograph and detailed description were taken. In the following description, color references are made to The Royal Horticultural Society Colour Chart, Fifth Edition, except where general terms of ordinary dictionary significance are used.

Botanical classification: *Chrysanthemum X morifolium* 'Domsunaci'.

Parentage:

Female, or seed, parent.—Proprietary selection of *Chrysanthemum X morifolium* identified as code number 802483, not patented.

Male, or pollen, parent.—Proprietary selection of *Chrysanthemum X morifolium* identified as code number 802167, not patented.

Propagation:

Type.—Terminal vegetative cuttings.

Time to initiate roots, summer.—About ten days at temperatures about 21° C.

Time to initiate roots, winter.—About twelve days at temperatures about 21° C.

Time to produce a rooted young plant, summer.—About three weeks at temperatures about 21° C.

Time to produce a rooted young plant, winter.—About four weeks at temperatures about 21° C.

Root description.—Medium in thickness, fibrous; typically light brown in color, actual color of the roots is dependent on substrate composition, water quality, fertilizer type and formulation, substrate temperature and physiological age of roots.

Rooting habit.—Freely branching; medium density.

Plant description:

Plant and growth habit.—Herbaceous decorative-type garden *Chrysanthemum*; stems upright to outwardly spreading giving a uniformly broadly mounded appearance to the plant; numerous lateral branches and relatively short internodes, dense and full plant form; moderately vigorous growth habit and medium growth rate.

Plant height.—About 21 cm.

Plant width.—About 31 cm.

Branching habit.—Freely branching habit; about nine lateral branches develop after removal of terminal apex (pinching).

Lateral branches.—Length: About 11 cm. Diameter: About 3 mm. Internode length: About 1.7 cm. Strength: Strong. Aspect: About 10° from vertical

and then bending upwardly. Texture: Fine pubescence. Color: Close to 146D.

Leaf description:

Arrangement.—Alternate, simple.

Length.—About 4.8 cm. 5

Width.—About 3 cm.

Shape.—Palmately-lobed; roughly ovate with three to five lobes.

Apex.—Broadly acuminate.

Base.—Attenuate. 10

Margin.—Slightly dentate and palmately lobed; sinuses between lateral lobes mostly divergent.

Texture, upper surface.—Fine pubescence; slightly rough.

Texture, lower surface.—Densely pubescent; slightly rough. 15

Venation pattern.—Pinnate.

Color.—Developing leaves, upper surface: Close to N137A. Developing leaves, lower surface: Close to 137B. Fully expanded leaves, upper surface: Close to 137B; venation, close to 137D. Fully expanded leaves, lower surface: Close to 147B; venation, close to 146C. 20

Petioles.—Length: About 1.2 cm. Diameter: About 2 mm. Texture, upper surface: Fine pubescence; slightly rough. Texture, lower surface: Densely pubescent; slightly rough. Color, upper surface: Close to 137D. Color, lower surface: Close to 146C. 25

Inflorescence description:

Form and flowering habit.—Decorative-type inflorescence form with ligulate-shaped ray florets; inflorescences borne on terminals above and beyond the foliar plane; disc and ray florets arranged acropetally on a capitulum; freely flowering habit with about 63 inflorescences developing per plant during the flowering season. 30 35

Fragrance.—Mildly fragrant; pungent, herbaceous.

Flowering response.—Earlier season flowering habit, plants exposed to natural season conditions begin flowering in mid-August in the United Kingdom; plants flower uniformly and continuously during the flowering season. 40

Inflorescence longevity.—Inflorescences maintain good color and substance for about three to five weeks on the plant; inflorescences persistent. 45

Inflorescence buds.—Height: About 4 mm. Diameter: About 5 mm. Shape: Oblate. Color: Close to 137B.

Inflorescence diameter.—About 5.4 cm.

Inflorescence height.—About 1.9 cm.

Disc diameter.—Disc floret development has not been observed.

Receptacles.—Height: About 4 mm. Diameter: About 4 mm. Shape: Conical. Color: Close to 145B.

Ray florets.—Number of ray florets per inflorescence: About 227 arranged in about nine whorls. Orientation: Initially upright, then about 75° from vertical; weakly concave. Length: About 2 cm. Width: About 6 mm. Shape: Ligulate. Apex: Emarginate. Base: Fused into a short tube. Margin: Entire. Texture, upper and lower surfaces: Smooth, glabrous; double-keeled. Color: When opening, upper surface: Close to 34A. When opening, lower surface: Close to 34B. Fully opened, upper surface: Close to N30A; color becoming closer to 34C with development. Fully opened, lower surface: Close to 34B; color becoming closer to 34D with development.

Phyllaries.—Number of phyllaries per inflorescence: About 18 arranged in about three whorls. Length: About 6 mm. Width: About 2 mm. Shape: Lanceolate. Apex: Acute. Base: Obtuse. Margin: Entire. Texture, upper surface: Smooth, glabrous; waxy. Texture, lower surface: Fine pubescence; waxy. Color, upper surface: Close to 144A. Color, lower surface: Close to 137B.

Peduncles.—Length, terminal peduncle: About 2.4 cm. Diameter, terminal peduncic: About 2 mm. Angle: Erect to about 5° from vertical. Strength: Moderately strong; flexible. Texture: Densely pubescent. Color: Close to 147B.

Reproductive organs.—Androecium: None observed. Gynoecium: Present only on ray florets. Pistil length: About 3 mm. Stigma shape: Bi-parted. Stigma color: Close to 9C. Style length: About 1 mm. Style color: Close to 1C. Ovary color: Close to 155A.

Seeds and fruits.—To date, seed and fruit production has not been observed on plants of the new *Chrysanthemum*.

Pathogen & pest resistance: To date, resistance to pathogens and pests common to *Chrysanthemum* plants has not been observed on plants of the new *Chrysanthemum*.

Garden performance: Plants of the new *Chrysanthemum* have demonstrated good garden performance and to tolerate temperatures from about 0° C. to about 35° C.

It is claimed:

1. A new and distinct *Chrysanthemum* plant named 'Dom-sunaci' as illustrated and described.

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