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(12) **United States Plant Patent**
McDonald(10) **Patent No.:** US PP16,126 P2
(45) **Date of Patent:** Nov. 22, 2005(54) **ARGYRANTHEMUM PLANT NAMED
'SUPA538'**(50) Latin Name: *Argyranthemum frutescens*
Varietal Denomination: Supa538(75) Inventor: **Daniel Bede McDonald**, Seven Hills
(AU)(73) Assignee: **Nuflora International Pty, Ltd.**,
Macquarie Fields (AU)(*) Notice: Subject to any disclaimer, the term of this
patent is extended or adjusted under 35
U.S.C. 154(b) by 30 days.(21) Appl. No.: **10/959,791**(22) Filed: **Oct. 6, 2004**(51) Int. Cl.⁷ **A01H 5/00**(52) U.S. Cl. **Plt./263**(58) Field of Search **Plt./263**

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ABSTRACT

A new and distinct cultivar of *Argyranthemum* plant named 'Supa538', characterized by its compact, upright and mounded plant habit; freely branching habit, dense and bushy plants; freely flowering habit with numerous inflorescences per plant; decorative-type inflorescence form with light purple-colored ray florets.

1 Drawing Sheet**1**

Botanical classification/cultivar denomination: *Argyranthemum frutescens* cultivar Supa538.

BACKGROUND OF THE INVENTION

The present invention relates to a new and distinct cultivar of *Argyranthemum* plant, botanically known as *Argyranthemum frutescens* and hereinafter referred to by the cultivar name 'Supa538'.

The new *Argyranthemum* is a product of a planned breeding program conducted by the Inventor in Cobbitty, New South Wales, Australia. The objective of the program is to create and develop new compact *Argyranthemum* cultivars with numerous inflorescences, interesting inflorescence form and attractive ray floret coloration.

The new *Argyranthemum* originated from a cross-pollination by the Inventor in September, 2001, of a proprietary selection of *Argyranthemum frutescens* identified as code number X95.1420.21, not patented, as the female, or seed, parent, with a proprietary selection of *Argyranthemum frutescens* identified as code number DM66.2, not patented, as the male, or pollen, parent. The new *Argyranthemum* was discovered and selected by the Inventor as a plant within the progeny of the stated cross-pollination in a controlled environment in Cobbitty, New South Wales, Australia in October, 2002. The selection of the new *Argyranthemum* was based on its attractive inflorescence form and ray floret coloration.

Asexual reproduction of the new *Argyranthemum* by terminal cuttings in a controlled environment in Cobbitty, New South Wales, Australia since October, 2002, has shown that the unique features of this new *Argyranthemum* are stable and reproduced true to type in successive generations.

SUMMARY OF THE INVENTION

The new *Argyranthemum* has not been observed under all possible environmental conditions. The phenotype may vary somewhat with variations in environment such as temperature and light intensity without, however, any variance in genotype.

The following characteristics have been repeatedly observed and are determined to be basic characteristics of

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'Supa538' and distinguish the new *Argyranthemum* as a new and distinct cultivar:

1. Compact, upright and mounded plant habit.
2. Freely branching habit, dense and bushy plants.
3. Freely flowering habit with numerous inflorescences per plant.
4. Decorative inflorescence form with light purple-colored ray florets.

Plants of the new *Argyranthemum* differ from plants of the female parent selection primarily in ray floret coloration as plants of the female parent selection have pink-colored ray florets. Plants of the new *Argyranthemum* differ from plants of the male parent selection primarily in inflorescence form and ray floret coloration as plants of the male parent selection have daisy-type inflorescences and pink and yellow-colored ray florets. In addition, plants of the new *Argyranthemum* were not as compact as plants of the male parent selection.

Plants of the new *Argyranthemum* can be compared to plants of the cultivar Summer Melody, disclosed in U.S. Plant Pat. No. 11,763. In side-by-side comparisons conducted in Cobbitty, New South Wales, Australia, plants of the new *Argyranthemum* differed primarily from plants of the cultivar Summer Melody in ray floret coloration.

BRIEF DESCRIPTION OF THE PHOTOGRAPHS

The accompanying colored photographs illustrate the overall appearance of the new cultivar, showing the colors as true as it is reasonably possible to obtain in colored reproductions of this type. Colors in the photographs may differ slightly from the color values cited in the detailed botanical description which accurately describe the colors of the new *Argyranthemum*.

The photograph at the bottom of the sheet comprises a side perspective view of typical flowering plants of 'Supa538' grown in a container.

The photograph at the top of the sheet comprises a close-up view of typical inflorescences of 'Supa538'.

DETAILED BOTANICAL DESCRIPTION

The aforementioned photographs, following observations and averaged measurements describe plants grown in Encinitas, Calif., in an outdoor nursery under full sunlight during the winter and spring with day temperatures ranging from 15 to 24° C. and night temperatures ranging from 10 to 19° C. Plants were grown in one-gallon containers with two plants per container. Plants were pinched one time about five weeks after planting. Plants had been growing for about 15 weeks when the photographs and description were taken. Color references are made to The Royal Horticultural Society Colour Chart, 1995 Edition, except where general terms of ordinary dictionary significance are used.

Botanical classification: *Argyranthemum frutescens* cultivar Supa538.

Parentage:

Female or seed parent.—Proprietary selection of *Argyranthemum frutescens* identified as code number X95.1420.21, not patented.

Male or pollen parent.—Proprietary selection of *Argyranthemum frutescens* identified as code number DM66.2, not patented.

Propagation:

Type.—Terminal vegetative cuttings.

Time to initiate roots.—About 10 days at 20° C.

Time to produce a rooted cutting.—About three weeks at 20° C.

Root description.—Fibrous, fine; white in color.

Rooting description.—Freely branching; dense.

Plant description:

General appearance.—Inverted triangle; compact, upright and mounded plant form with dense foliage and inflorescences held above and beyond the foliage. Moderately vigorous to vigorous growth habit.

Plant height.—About 28 cm.

Plant width, single plant.—About 29.5 cm.

Lateral branch description.—Quantity per plant: About ten primary lateral branches; each with about four or five secondary lateral branches. Length: About 24 cm. Diameter: About 2.5 cm. Internode length: About 7 mm. Aspect: Upright to outwardly spreading. Texture: Smooth, glabrous. Color: 144A.

Foliage description.—Arrangement: Alternate, simple. Length: About 3.7 cm. Width: About 2.5 cm. Shape: Pinnatifid, deeply and finely dissected. Apex: Acute. Base: Attenuate. Margin: Entire; deeply and finely dissected; sinuses parallel. Texture, upper and lower surfaces: Smooth, glabrous. Venation pattern: Pinnae. Petiole length: About 1.8 cm. Petiole diameter: About 2.5 mm. Petiole texture, upper and lower surfaces: Smooth, glabrous. Color: Developing and fully expanded foliage, upper surface: 147A. Developing and fully expanded foliage, lower surface: 147B. Venation, upper and lower surfaces: 147B. Petiole, upper and lower surfaces: 147B.

Inflorescence description:

Appearance.—Decorative-type inflorescence form with ligulate ray florets. Disc and ray florets develop acropetally on a capitulum. Inflorescences held upright and outwardly on terminal and axillary peduncles. Inflorescences positioned perpendicular to the peduncles. Inflorescences persistent.

Flowering response.—Under natural conditions, plant flower from spring to early fall in Southern California; plants flower continuous during this period.

Inflorescence longevity.—Inflorescences last about ten days on the plant.

Quantity of inflorescences.—Freely flowering, about ten open inflorescences per lateral branch.

Fragrance.—Not detected.

Inflorescence size.—Diameter: About 4 cm. Depth (height): About 1.3 cm. Diameter of disc: About 3 mm. Receptacle height: About 6 mm. Receptacle diameter: About 1.4 cm.

Inflorescence buds, at stage of showing color.—Height: About 1 cm. Diameter: About 7 mm. Shape: Ovoid. Color: 75A.

Ray florets.—Quantity per inflorescence: About 142 arranged in about seven whorls. Shape: Ligulate. Length: About 2 cm. Width: About 5 mm. Apex: Emarginate. Base: Acute. Margin: Entire. Texture, upper and lower surfaces: Smooth, satiny. Aspect: Initially upright; when mature, horizontal to the peduncle and eventually reflexing. Color: When opening, upper surface: 72C. When opening, lower surface: 75D. Fully opened, upper surface: 75B to 75C; color becoming closer to 75D with development. Fully opened, lower surface: 75D.

Disc florets.—Arrangement: Massed at the center of the inflorescence. Quantity per inflorescence: About two. Shape: Tubular, elongated; apex, five-pointed; base, fused. Length: About 6 mm. Diameter, apex: About 2 mm. Diameter, base: Less than 1 mm. Color: Immature: 75A. Mature, apex: 75B. Mature, mid-section: 75D. Mature, base: 155D.

Involucral bracts (phyllaries).—Appearance: Scale-like; margins, papery. Quantity per inflorescence: About 20. Length: About 3 mm. Width: About 2 mm. Shape: Elliptic. Apex: Acute. Base: Truncate. Margin: Entire. Texture, upper and lower surfaces: Glabrous, smooth. Color, upper and lower surfaces: 146B.

Peduncle.—Strength: Moderately strong; wiry. Aspect: Upright to about 45° from vertical. Length, terminal inflorescence: About 6.5 cm. Length, fourth inflorescence: About 13.5 cm. Diameter: About 1.5 mm. Texture: Smooth, glabrous. Color: 144A.

Reproductive organs.—Androecium: Present on disc florets only. Quantity per floret: Five. Anther shape: Oblong. Anther length: Less than 1 mm. Anther color: 17A. Amount of pollen: Scarce. Pollen color: 17A. Gynoecium: Present on ray and disc florets. Quantity per floret: One. Pistil length: About 6 mm. Stigma shape: Two-parted. Stigma color: 13A. Style length: About 4 mm. Style color: 13D. Ovary color: 157A. Seed/fruit: Seed and fruit production has not been observed.

Disease/pest resistance: Resistance to pathogens and pests common to *Argyranthemums* has not been observed on plants grown under commercial conditions.

Temperature/weather tolerance: Plants of the new *Argyranthemum* have been observed to be tolerant to rain, wind and to temperatures from -1 to 30° C.

It is claimed:

1. A new and distinct cultivar of *Argyranthemum* plant named 'Supa538', as illustrated and described.

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U.S. Patent

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