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Hammett

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## 4] CHRYSANTHEMUM PLANT NAMED 'FLIRTATION'

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2] U.S. Cl. .... Plt./74.1

8] Field of Search ..... Plt./74.1, 82.4

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### [57] ABSTRACT

A distinct cultivar of *Chrysanthemum* plant named Flirtation, characterized by its flat capitulum form; moderately vigorous and short growth habit; freely branching plant habit; small daisy-type inflorescences; soft pink ray florets; numerous inflorescences per plant; and good garden performance.

### 1 Drawing Sheet

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The present invention relates to a new and distinct cultivar *Chrysanthemum* plant, botanically known as *Dendranthema grandiflora* and referred to by the cultivar name Flirtation.

The new cultivar is a product of a planned breeding program conducted by the inventor in Massey, Auckland, New Zealand. The objective of the breeding program was to create new *Chrysanthemum* cultivars having a fast flowering response, desirable inflorescence colors, and good garden performance.

The new cultivar originated from an open pollination of the *Chrysanthemum* cultivar Magic Dream (not patented) as the female or seed parent with the male or pollen parent which is either the *Chrysanthemum* cultivar Magic Sunset, Magic Dawn or Magic Garden (all nonpatented). The actual crossing was effected by pollinating insects.

The cultivar Flirtation was discovered and selected by the inventor as a flowering plant within the progeny of the stated cross in a controlled environment in Massey, Auckland, New Zealand.

Asexual reproduction of the new cultivar by terminal cuttings taken at Massey, Auckland, New Zealand, has shown that the unique features of this new *Chrysanthemum* are stable and reproduced true to type in successive generations.

The following traits have been repeatedly observed and determined to be the unique characteristics of Flirtation. These characteristics in combination distinguish Flirtation as a new and distinct cultivar:

1. Flat capitulum form.
2. Moderately vigorous and short growth habit.
3. Freely branching plant habit.
4. Small daisy-type inflorescences.
5. Soft pink ray florets.
6. Numerous inflorescences per plant.
7. Good garden performance.

The cultivar Flirtation has not been observed under all

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possible environmental conditions. The phenotype may vary somewhat with variations in environment such as temperature, daylength and light intensity, without, however, any variance in genotype.

5 In side-by-side comparisons in Massey, Auckland, New Zealand, under commercial practice, plants of the new *Chrysanthemum* have more ray florets, larger inflorescences, and flower 10 days earlier than the female parent, the *Chrysanthemum* cultivar Magic Dream. Additionally, the ray floret color of the *Chrysanthemum* cultivar Magic Dream is dark purple compared to the soft pink ray floret color of the new *Chrysanthemum*. In the same comparisons, plants of the new *Chrysanthemum* differ from the probable male parents in ray floret color. The cultivar Magic Sunset has crimson ray florets, the cultivar Magic Dawn has light yellow ray florets and the cultivar Magic Garden has yellow ray florets compared to the soft pink ray floret color of the new *Chrysanthemum*. Additionally, plants of the cultivars Magic Sunset and Magic Dawn have fewer ray florets per inflorescence than plants of the new *Chrysanthemum*.

Plants of the new *Chrysanthemum* are similar to the cultivar Megan (U.S. Plant Pat. No. 8,756) in ray floret color. However, in side-by-side comparisons conducted in Oxnard, Calif., under commercial practice, plants of the new *Chrysanthemum* differed from plants of the cultivar Megan in the following characteristics:

1. Plants of the new *Chrysanthemum* are taller and have longer lateral stems than plants of the cultivar Megan.
2. Plants of the new *Chrysanthemum* have more leaves per lateral stem than plants of the cultivar Megan.
3. Leaves of plants of the new *Chrysanthemum* are larger than leaves of plants of the cultivar Megan.
4. Inflorescences of plants of the new *Chrysanthemum* are larger than inflorescences of plants of the cultivar Megan.
5. Ray florets of plants of the new *Chrysanthemum* are larger than ray florets of plants of the cultivar Megan.

6. Plants of the new *Chrysanthemum* have fewer ray florets but more disc florets per inflorescence than plants of the cultivar Megan.

7. Peduncles of plants of the new *Chrysanthemum* are longer and stronger than peduncles of plants of the cultivar Megan.

8. The peduncle angle of plants of the new *Chrysanthemum* is more obtuse than the peduncle angle of plants of the cultivar Megan.

A detailed comparison of plants of the new *Chrysanthemum* and the cultivar Megan appears in Chart A at the end of the specification.

The accompanying colored photograph illustrates 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. The photograph comprises a top perspective view of a typical flowering 16.5-cm container of Flirtation with three cutting in the container.

In the following description, color references are made to the Royal Horticultural Society Colour Chart except where general terms of ordinary dictionary significance are used. The following observations and measurements describe plants grown in Oxnard, Calif. under commercial practice in a glass-covered greenhouse with average night temperatures of 18C, average day temperatures of 30C, and light levels of 2,000 (cloudy conditions) to 9,000 (sunny conditions) foot-candles.

After sticking unrooted cuttings of the new cultivar, plants received 21 long day/short nights followed by short day/long nights until flowering. Measurements and numerical values represent ranges or averages for six typical flowering plants.

**Botanical classification:** *Dendranthema grandiflora* cultivar Flirtation.

**Commercial classification:** Garden chrysanthemum.

**Parentage:**

*Female, or seed, parent.*—*Dendranthema grandiflora* cultivar Magic Dream (not patented).

*Male, or pollen, parent.*—Either *Dendranthema grandiflora* cultivar Magic Sunset, Magic Dawn or Magic Garden (all nonpatented).

**Propagation:**

*Type.*—Terminal tip cuttings.

*Time to rooting.*—9 to 11 days with soil temperatures of 21C.

*Rooting habit.*—Fine, fibrous and well-branched.

**Plant description:**

*Appearance.*—Perennial herbaceous decorative garden plant. Stems upright, uniform habit and freely branching. Moderately vigorous and compact growth habit.

*Plant height.*—About 23 cm.

*Lateral branch length.*—About 20 cm.

*Quantity of lateral branches after removal of apical meristem.*—About 5.

*Stem color.*—147B.

*Foliage description.*—Number of leaves per lateral branch: About 16. Leaf arrangement: Alternate. Leaf size, fully expanded: Length: About 6.5 cm. Width: About 3.8 cm. Leaf apex: Acuminate. Leaf base: Attenuate. Leaf margin: Palmately lobed. Leaf texture: Upper and under surfaces slightly pubescent,

smooth and dull. Veins prominent on under surface. Petiole length: About 1 cm. Color: Young foliage upper surface: 147A. Young foliage under surface: 147B. Fully expanded foliage upper surface: 147A. Fully expanded foliage under surface: 147B. Venation upper surface: 147B. Venation under surface: 147B. Petiole: 147A.

**Flowering description:**

*Appearance.*—Daisy inflorescence form. Inflorescences borne on terminals above foliage, arising from leaf axils. Disc and ray florets arranged acropetally on a flat capitulum.

*Flowering response.*—Under natural conditions, plant flower in the autumn/winter in the Northern Hemisphere. At other times of the year, inflorescence initiation and development can be induced under short day/long night conditions (at least 13.5 hours of darkness). Plants exposed to 2 to 3 weeks of long day/short night conditions after sticking followed by photoinductive short day/long night conditions, flower about 55 to 59 days later.

*Quantity of Inflorescences.*—About 5 inflorescences per flowering stem.

*Inflorescence size.*—Diameter: About 5.5 cm. Depth (height): About 1 cm. Diameter of disc: About 1.6 cm.

*Ray Florets.*—Shape: Short, broad. Size: Length: About 2.5 cm. Width: About 1.4 cm. Apex: Dentate. Base: Acute. Margin: Entire. Texture: Satiny, smooth and glabrous. Aspect: Flat. Number of ray florets per inflorescence: About 32. Color: When opening, upper surface: 75A/75B. When opening, under surface: 75A. Mature, upper surface: 69A, fading to very light pink with subsequent development. Mature, under surface: 155D.

*Disc florets.*—Shape: Tubular. Size: Length: About 6 mm. Width: About 1 mm. Number of disc florets per inflorescence: About 130. Color: Immature: 154A. Mature: 13A.

*Peduncle.*—Aspect: Strong and angled about 40° to the stem. Length: About 9 cm. Texture: Glabrous. Color: 147B.

*Reproductive organs.*—Androecium: Present on disc florets only. Anther color: 13A. Pollen: Moderate, 13A in color. Gynoecium: Present on both ray and disc florets. Style color: 154C.

**Disease resistance:** High tolerance to Brown Rust, *Puccinia chrysanthemi* Roze., has been observed on plants grown under commercial greenhouse conditions.

**Seed production:** Seed production has not been observed.

**CHART A**

CHARACTERISTIC	FLIRTATION	MEGAN
PLANT HEIGHT	About 23 cm	About 20 cm
LATERAL STEM LENGTH	About 20 cm	About 16 cm
QUANTITY OF LEAVES PER LATERAL STEM	About 16	About 14.5
LEAF LENGTH	About 6.5 cm	About 4.5 cm
LEAF WIDTH	About 3.8 cm	About 2.5 cm
INFLORESCENCE DIAMETER	About 5.5 cm	About 4 cm
INFLORESCENCE HEIGHT	About 1 cm	About 0.8 cm
RAY FLORET LENGTH	About 2.5 cm	About 1.7 cm

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CHART A

CHARACTERISTIC	FLIRTATION	MEGAN
RAY FLORET WIDTH	About 1.4 cm	About 0.5 cm
RAY FLORET COLOR, WHEN OPENING, UPPER SIDE	75A/75B	75A/75B
RAY FLORET COLOR, MATURE, UPPER SIDE	69A	69A
RAY FLORET COLOR, MATURE, LOWER SIDE	155D	69C
NUMBER OF RAY FLORETS PER FLORESCENCE	About 32	About 70
NUMBER OF DISC FLORETS PER FLORESCENCE	About 130	About 62

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CHART A

CHARACTERISTIC	FLIRTATION	MEGAN
DIAMETER OF DISC	About 1.6 cm	About 0.9 cm
PEDUNCLE LENGTH	About 9 cm	About 5 cm
PEDUNCLE STRENGTH	Strong	Weak
PEDUNCLE ANGLE TO STEM	About 40°	About 30°

It is claimed:

1. A new and distinct cultivar of Chrysanthemum plant named Flirtation, as illustrated and described.

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**U.S. Patent**

**Oct. 14, 1997**

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