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

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(54) **CHRYSANTHEMUM PLANT NAMED**
'ARTIST ORANGE'

(51) **Int. Cl.**
A01H 5/00 (2006.01)

(50) Latin Name: *Chrysanthemum morifolium*
Varietal Denomination: **Artist Orange**

(52) **U.S. Cl.** **Plt./296**

(58) **Field of Classification Search** **Plt./296**
See application file for complete search history.

(75) Inventor: **Mark Roland Boeder**, The Hague
(NL)

Primary Examiner—Anne Marie Grunberg

Assistant Examiner—Annette H Para

(73) Assignee: **Chrysanthemum Breeders Association**
N.V. (NL)

(74) *Attorney, Agent, or Firm*—Steptoe & Johnson LLP

(*) Notice: Subject to any disclaimer, the term of this
patent is extended or adjusted under 35
U.S.C. 154(b) by 75 days.

(57) **ABSTRACT**

A *Chrysanthemum* plant named 'Artist Orange' character-
ized by its medium sized daisy-type blooms with yellow/red
ray-florets and green disc florets.

(21) Appl. No.: **11/020,351**

(22) Filed: **Dec. 27, 2004**

3 Drawing Sheets

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RELATED CULTIVARS

'Artist Orange' is related to 'Artist Yellow' (U.S. Plant
Pat. No. 14,806), of which it is a color mutant.

BACKGROUND OF THE INVENTION

'Artist Orange' is a product of a breeding and selection
program which had the objective of finding color mutants of
'Artist Yellow'. The new plant of the present invention
comprises a new and distinct cultivar of *chrysanthemum*
plant that is a natural occurring sport of a parent *chrysan-*
themum named 'Artist Yellow'. A comparison with parent
chrysanthemum 'Artist Yellow' is also made in this appli-
cation. The new and distinct cultivar was discovered as a
whole plant mutation by Mark Roland Boeder in a con-
trolled environment (greenhouse) in Rijnsenhout Holland in
2002. The first act of asexual reproduction of 'Artist Orange'
was accomplished when vegetative cuttings were taken from
the initial selection in 2002 and propagated in a controlled
environment in Rijnsenhout, Holland.

SUMMARY OF THE INVENTION

The present invention is a new and distinct variety of
chrysanthemum bearing medium sized daisy blooms with
orange/red ray-florets and green disc florets.

BRIEF DESCRIPTION OF THE DRAWINGS

The present invention of a new and distinct variety of
chrysanthemum is shown in the accompanying drawings, the
color being as nearly true as possible with color photographs
of this type.

FIG. 1 shows a plant of the cultivar in full bloom.

FIG. 2 shows the various stages of bloom of the new
cultivar.

FIG. 3 shows the foliage of the new cultivar.

DESCRIPTION OF THE INVENTION

This new variety of *chrysanthemum* is of the botanical
classification *Chrysanthemum morifolium* L. The observa-

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tions and measurements were gathered from plants grown in
April/May in a greenhouse in Rijnsenhout Holland in a
photo-periodic controlled crop under conditions generally
used in commercial practice. The greenhouse temperatures
during this crop were at day-time between 18° C. and 25° C.
and at night 20° C. After a long day period of 14 days the
photo-periodic response time in this crop was 54 days. After
the long day period to flowering plant growth retardants
were applied once in a dose of 2 gram/liter water. The plants
were observed (directly) during the flowering of this crop.
The plant is sensitive to infestation by Powdery Mildew. The
plant is tolerant to low night temperatures. This new variety
produces medium sized blooms with yellow/red ray-florets
and green disc-florets blooming on the plant for 5 weeks.
This new variety of *chrysanthemum* has been found to retain
its distinctive characteristics throughout successive propa-
gations however the phenotype may vary significantly with
variations in environment such as light intensity and tem-
perature. To show the phenotype as described 'Artist
Orange' can be planted without assimilation lightning (high
pressure sodium lamps) between week 1 and week 35 under
greenhouse conditions in Holland. With assimilation light
(minimum level 2500 lux) it can be planted year round under
greenhouse conditions in Holland.

From the cultivars known to inventor the most similar
existing cultivar in comparison to 'Artist Orange' is 'Artist
Yellow' and 'Orange Reagan' (U.S. Plant Pat. No. 8,769).
When 'Artist Orange', 'Artist Yellow', and 'Orange Reagan'
are being compared the following differences and similari-
ties are noticed: All three plants have daisy-type blooms.
The difference of 'Artist Orange', 'Artist Yellow' and
'Orange Reagan' is the color of the ray-florets. In 'Orange
Reagan' this color is orange, while it is in 'Artist Orange' a
pattern of red streaks on an orange background, and in
'Artist Yellow' red streaks on a yellow background.

The following is a description of the plant and character-
istics that distinguish 'Artist Orange' as a new and distinct
variety. The color designations are taken from the plant
itself. Accordingly, any discrepancies between the color
designations and the colors depicted in the photographs are
due to photographic tolerances. The color chart used in this

description is: The Royal Horticultural Society Colour Chart, edition 1995.

TABLE 1

Botanical Description of CULTIVAR ‘Artist Orange’	
<u>Bud</u>	
Size	Medium, cross-section 1 cm height 1 cm
Outside color	Orange 29 B
Involucral bracts	2 rows, length 7 mm, width 3 mm
Involucral bracts among disc-florets	Not present
Involucral bracts color	Green 141 B
<u>Bloom</u>	
Type	Daisy
Size	Medium
Fully expanded	5–6 cm
Number of blooms per stem	Average of 14
Performance on the plant	5 weeks
Seeds (if crossed)	Produced in large quantities, oval shaped, Grey-brown 199 A, 2 mm in length
Fragrance	Typical <i>chrysanthemum</i> , slight
Peduncle length	Near the top 6 cm, near the middle 11 cm, near the bottom 21 cm
Peduncle color	Green 143C–D
<u>Color</u>	
Center of the flower (disc-florets)	Immature Yellow-green 154 C Mature Yellow-orange 15A
Color of the ray-florets	Upper surface Orange 29A with streaks of Red 45B Lower surface Greyed Orange 164C with streaks of Greyed-Orange 173B
Tonality from Distance	A spray mum with orange/red flowers and green disc
Color of the upper surface of the ray-florets after aging of the plant	Orange 29A with streaks of Red 45B
<u>Ray florets</u>	
Texture	Upper and under side smooth
Number	25
Cross section	Flat
Longitudinal axis of majority	Straight
Length of corolla tube	0.4 cm
Ray-floret margin	Entire
Ray-floret length	2.8–3 cm
Ray-floret width	0.9 cm
Ratio length/width	Medium
Shape of tip	Rounded
<u>Disc florets</u>	
Disc diameter	1 cm
Distribution of disc florets	Numerous, clearly visible at all stages of flowering.
Shape	Tubular
Receptacle shape	Domed Raised
<u>Reproductive Organs</u>	
Stamen (present in disc florets only)	Thin 3 mm in length
Stamen color	Yellow-green 144 B
Pollen	Present
Pollen color	Yellow-orange 14 A
Styles (present in both ray and disc florets)	Thin
Style color	Yellow-green 150 B
Style length	0.4 cm

TABLE 1-continued

Botanical Description of CULTIVAR ‘Artist Orange’	
Stigma color	Yellow-green 144 B
Stigma width	0.2 cm
Ovaries	Enclosed in perianth
<u>Plant</u>	
Form	A spray mum meant for erect culture
Growth habit	Upright
Growth rate	Vigorous
Height	90 cm
Width	25 cm
Internode length	2.5–3 cm
Spray formation	Cylindrical
Stem Color	Green 138A–B
Stem Strength	Strong
Stem Brittleness	Not brittle
Stem Anthocyanin coloration	Absent
Flowering Response (photo-periodic controlled crop, not natural season)	54 days
<u>Foliage</u>	
Color immature stage	Upper side Green 143B–144B Lower side Green 139C–139D
Color mature stage	Upper side Green 137A–138A Lower side Green 138A–138B
Color midvein mature leaf	Upper side Yellow-green 147D Under side Yellow-green 145D
Size	Medium; length 11 cm, width 7 cm
Quantity (number per single stem)	28
Shape	Cordiform
Texture upper side	Fleshy and glabrous
Texture under side	Pubescent
Venation arrangement	Palmate
Shape of the margin	Lobed - serrated
Shape of Base of Sinus Between Lateral Lobes	Rounded
Margin of Sinus Between Lateral Lobes	Converging
Shape of Base	Truncate
Apex	Mucronulate
Petiole Length	2 cm
Petiole Color	Yellow-green 147D

TABLE 2

Differences with the comparison Varieties			
	‘Artist Orange’	‘Artist Yellow’	‘Orange Reagan’
Color upper side ray-florets	Orange 29A and Red 45B	Yellow-orange 14B and Red 46A	Greyed-orange 169A–169B
Color lower side ray-florets	Greyed-orange 164C and greyed-orange 173B	Yellow-orange 14C and Red 46B	Greyed-orange 163B

I claim:

1. A new and distinct variety of *chrysanthemum* plant as described and illustrated.

* * * * *



FIG. 1



FIG. 2

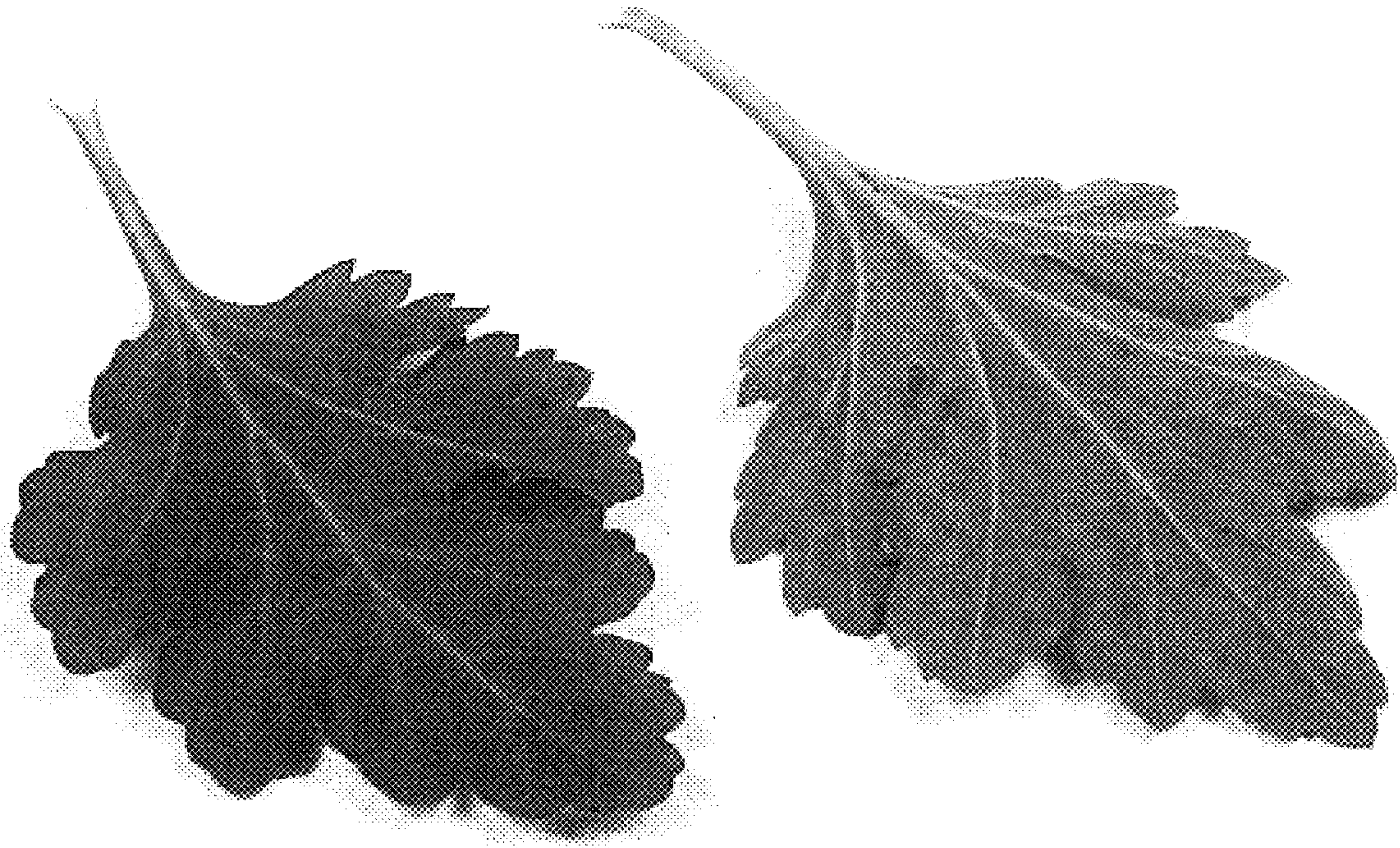


FIG. 3