



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

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(54) **ASTER PLANT NAMED 'VIBRANT DOME'**

(50) Latin Name: *Aster novae-angliae*  
Varietal Denomination: **Vibrant Dome**

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See application file for complete search history.

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(57) **ABSTRACT**

A new and distinct cultivar of *Aster* plant named 'Vibrant  
Dome', characterized by its uniform, upright and mounded  
plant habit; freely branching growth habit; dark green-  
colored foliage; uniform and freely flowering habit; semi-  
double-type inflorescences with purple-colored ray florets;  
and food garden performance.

**1 Drawing Sheet**

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Botanical designation: *Aster novae-angliae*.  
Cultivar denomination: 'Vibrant Dome'.

#### BACKGROUND OF THE INVENTION

The present invention relates to a new and distinct cultivar  
of *Aster* plant, botanically known as *Aster novae-angliae*  
and hereinafter referred to by the name 'Vibrant Dome'.

The new *Aster* is a naturally-occurring whole plant muta-  
tion of the *Aster novae-angliae* cultivar Purple Dome, not  
patented. The new *Aster* was discovered and selected by the  
Inventor as a single flowering plant within a population of  
plants of the cultivar Purple Dome in a controlled green-  
house environment in Shaker Heights, Oh. during the fall of  
2004. The selection of this plant was based on its unique ray  
florete color.

Asexual reproduction of the new *Aster* by vegetative tip  
cuttings was first conducted in Lancaster, Pa. in November,  
2005. Asexual reproduction by cuttings has shown that the  
unique features of this new *Aster* are stable and reproduced  
true to type in successive generations.

#### SUMMARY OF THE INVENTION

Plants of the cultivar Vibrant Dome have not been  
observed under all possible environmental conditions. The  
phenotype may vary somewhat with variations in environ-  
ment such as temperature, 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 'Vibrant  
Dome'. These characteristics in combination distinguish  
'Vibrant Dome' as a new and distinct potted *Aster* cultivar:

1. Uniform, upright and mounded plant habit.
2. Freely branching growth habit.
3. Dark green-colored foliage.
4. Uniform and freely flowering habit.
5. Semi-double type inflorescences with purple-colored  
ray florets.
6. Good garden performance.

Plants of the new *Aster* differ from plants of the parent,  
the cultivar Purple Dome, primarily in ray floret color as

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plants of the cultivar Purple dome have darker purple-  
colored ray florets.

Plants of the new *Aster* can be compared to plants of the  
*Aster* cultivar Patricia Ballard, not patented. In side-by-side  
comparisons conducted in Lancaster, Pa., plants of the new  
*Aster* differed from plants of the cultivar Patricia Ballard in  
the following characteristics:

1. Plants of the new *Aster* were more compact and mound-  
ing than plants of the cultivar Patricia Ballard.
2. Plants of the new *Aster* were stronger than plants of the  
cultivar Patricia Ballard.
3. Plants of the new *Aster* and the cultivar Patricia Ballard  
differed in ray floret coloration.

#### BRIEF DESCRIPTION OF THE PHOTOGRAPHS

The accompanying photographs illustrate the overall  
appearance of the new *Aster*. These photographs show 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 *Aster*.

The photograph at the bottom of the sheet comprises a  
side perspective view of a typical flowering plant of 'Vibrant  
Dome'.

The photograph at the top of the sheet is a close-up view  
of typical inflorescences of 'Vibrant Dome'.

#### DETAILED BOTANICAL DESCRIPTION

The aforementioned photographs and following observa-  
tions and measurements describe plants grown during the  
summer and fall in Lancaster, Pa. in an outdoor nursery and  
under conditions and practices which approximate those  
generally used in commercial potted *Aster* production. Dur-  
ing the production of the plants, day temperatures ranged  
from 18° C. to 35° C. and night temperatures ranged from 7°  
C. to 27° C. Rooted cuttings were planted in 20-cm  
containers, and exposed to natural season conditions. Plants  
used in the photographs and for the description were about  
ten months old. In the following description, color refer-



ences are made to The Royal Horticultural Society Colour Chart, 1995 Edition, except where general terms of ordinary dictionary significance are used.

Botanical classification: *Aster novae-angliae* cultivar Vibrant Dome.

Parentage: Naturally occurring whole plant mutation of the *Aster novae-angliae* cultivar Purple Dome, not patented.

Propagation:

*Type*.—Terminal vegetative cuttings.

*Time to initiate roots, summer*.—About two days at temperatures of about 27° C.

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

*Time to produce a rooted young plant, summer*.—About seven days at temperatures of about 27° C.

*Time to produce a rooted young plant, winter*.—About twelve days at temperatures of about 21° C.

*Root description*.—Medium thickness, fibrous; white in color.

*Rooting habit*.—Freely branching; dense.

Plant description:

*Appearance*.—Herbaceous semi-double-type potted *Aster*. Upright with lateral branches somewhat outwardly spreading; inverted triangle with uniformly mounded crown. Freely branching growth habit with about three primary lateral branches each with six to eight secondary branches; dense and full plants. Vigorous growth habit.

*Plant height*.—About 16 cm.

*Plant width*.—About 25 cm.

*Lateral branches*.—Length: About 12 cm. Diameter: About 6 mm. Internode length: About 9 mm. Strength: Strong. Texture: Densely pubescent, hirsute. Color: Close to 193A.

Foliage description:

*Arrangement*.—Alternate, simple; sessile.

*Length*.—About 8.2 cm.

*Width*.—About 2 cm.

*Shape*.—Oblong to lanceolate.

*Apex*.—Acute.

*Base*.—Auriculate; clasping.

*Margin*.—Entire.

*Texture, upper and lower surfaces*.—Pubescent; rough.

*Color*.—Developing foliage, upper and lower surfaces: Close to 137A. Fully expanded foliage, upper surface: Close to 147A; ventation, 147C. Fully expanded foliage, lower surface: Close to 137C; venation, 147B.

Inflorescence description:

*Appearance*.—Semi-double type inflorescence form with ligulate-shaped ray florets. Inflorescences borne in clusters of four to five per terminal above and beyond the foliage. Disk and ray florets arranged acropetally on a capitulum. Inflorescence not fragrant.

*Flowering response*.—Under natural conditions, plants flower in late summer/early fall in the Northern Hemisphere. Inflorescences persistent. Inflorescences last about four to five days on the plant.

*Quantity of inflorescences*.—Freely flowering, about eight to ten developing and open inflorescences per lateral stem.

*Inflorescence bud*.—Height: About 1 cm. Diameter: About 6 mm. Shape: Ovoid. Color: Close to 77A.

*Inflorescence size*.—Diameter: About 4 cm. Depth (height): About 2.4 cm. Diameter of disc: About 7 mm. Receptacle height: About 9 mm. Receptacle diameter: About 7 mm.

*Ray florets*.—Length: About 2.2 cm. Width: About 2 mm. Shape: Ligulate. Apex: Acute. Base: Attenuate. Margin: Entire. Texture, upper and lower surfaces: Smooth, glabrous, satiny. Orientation: Initially upright, then about 90° from vertical or perpendicular to peduncle; apices reflexing with development. Number of ray florets per inflorescence: About 52 arranged in about three whorls. Color: When opening, upper surface: Close to 72A. When opening, lower surface: Close to 72B. Fully opened, upper surface: Close to 77B. Fully opened, lower surface: Close to 77C.

*Disc florets*.—Arrangement: Massed at center of receptacle. Shape: Tubular, elongated. Apex: Five-pointed. Length: About 8 mm. Width: 1 mm. Number of disc florets per inflorescence: About 64. Color, immature: Apex: Close to 72A. Mid-section: Close to 148D. Base: Close to 157A. Color, mature: Apex: Close to 77B. Mid-section: Close to 78D. Base: Close to 157A.

*Phyllaries*.—Number of phyllaries per inflorescence: About 44 arranged in about five whorls. Length: About 1 cm. Width: About 1 mm. Shape: Lanceolate. Apex: Acuminate. Base: Truncate. Texture, upper and lower surfaces: Pubescent. Color, upper and lower surfaces: Close to 147A.

*Peduncles*.—Length: First peduncle: About 1.8 cm. Fourth peduncle: About 1.3 cm. Diameter (first peduncle): About 1.5 mm. Angle: Upright to about 45° from vertical. Strength: Strong, flexible. Texture: Pubescent. Color: Close to 147C.

*Reproductive organs*.—Androecium: Present on disc florets only. Filament length: About 1 mm. Filament color: Close to 157D. Anther shape: Slender, elongated oblong. Anther length: About 2 mm. Anther color: Close to 177D. Pollen amount: None observed. Gynoecium: Present on both ray and disc florets. Pistil length: About 7 mm. Stigma shape: Bi-parted. Stigma color: Close to 151A. Style length: About 4 mm. Style color: Close to 150C. Ovary color: Close to 157D.

*Seed/fruit*.—Seed and fruit production has not been observed.

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

Garden performance: Plants of the new *Aster* have been observed to be rain and wind tolerant and to tolerate temperatures from 2° C. to about 35° C.

It is claimed:

1. A new and distinct *Aster* plant named 'Vibrant Dome' as illustrated and described.

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