

(12) United States Plant Patent **US PP24,347 P2** (10) Patent No.: Mar. 25, 2014 Geibel (45) **Date of Patent:**

(57)

5

30

- **GERANIUM PLANT NAMED 'PACPERFU'** (54)
- Latin Name: *Pelargonium crispum* (50)Varietal Denomination: **Pacperfu**
- Martin Geibel, Dresden (DE) (75)Inventor:
- Assignee: Elsner PAC Jungpflanzen, Dresden (73)(DE)
- Subject to any disclaimer, the term of this (*) Notice: patent is extended or adjusted under 35 U.S.C. 154(b) by 56 days.
- U.S. Cl. (52)USPC Plt./324 **Field of Classification Search** (58)See application file for complete search history.

Primary Examiner — Annette Para (74) Attorney, Agent, or Firm — C. A. Whealy

- Appl. No.: 13/507,247 (21)
- Jun. 14, 2012 (22)Filed:
- Int. Cl. (51)A01H 5/00

(2006.01)

ABSTRACT

A new and distinct cultivar of Lemon-scented Geranium plant named 'Pacperfu', characterized by its upright and uniformly rounded plant habit; moderately vigorous growth habit; freely basal branching habit; leaves that are strongly lemonscented; early and freely flowering habit; and dark red purple and light purple-colored flowers.

1 Drawing Sheet

Botanical designation: *Pelargonium crispum*. Cultivar denomination: 'Pacperfu'.

BACKGROUND OF THE INVENTION

The present invention relates to a new and distinct cultivar of Lemon-scented Geranium plant, botanically known as Pelargonium crispum, and hereinafter referred to by the name 'Pacperfu'. The new Lemon-scented Geranium plant is a product of a ¹⁰ planned breeding program conducted by the Inventor in Dresden, Germany. The objective of the breeding program is to develop new freely flowering Lemon-scented Geranium plants with strongly fragrant leaves. The new Lemon-scented Geranium plant originated from a cross-pollination made by the Inventor in Dresden, Germany during the summer of 2007 of two unnamed proprietary selections of *Pelargonium crispum*, not patented. The new Lemonscented Geranium plant was discovered and selected by the 20 Inventor as a flowering plant from within the progeny of the stated cross-pollination in a controlled greenhouse environment in Dresden, Germany during the spring of 2008. Asexual reproduction of the new Lemon-scented Geranium plant by vegetative terminal cuttings in a controlled 25 greenhouse environment in Dresden, Germany since October, 2008 has shown that the unique features of this new Lemon-scented Geranium plant are stable and reproduced true to type in successive generations.

1. Upright and uniformly rounded plant habit. 2. Moderately vigorous growth habit. 3. Freely basal branching habit. 4. Leaves that are strongly lemon-scented. 5. Early and freely flowering habit. 6. Dark red purple and light purple-colored flowers. 7. Does not require cooling treatment for flower development.

Plants of the new Lemon-scented Geranium differ primarily from plants of the parent selections in flower coloration. In addition, plants of the new Lemon-scented Geranium are more uniform than plants of the parent selections. Plants of the new Lemon-scented Geranium can be com-15 pared to plants of the *Pelargonium crispum* 'Pacburg', disclosed in U.S. Plant Pat. No. 14,862. In side-by-side comparisons conducted in Dresden, Germany, plants of the new Lemon-scented Geranium differed from plants of 'Pacburg' in the following characteristics:

SUMMARY OF THE INVENTION

- 1. Plants of the new Lemon-scented Geranium had thicker lateral branches than plants of 'Pacburg'.
- 2. Plants of the new Lemon-scented Geranium had broader leaves than plants of 'Pacburg'.
- 3. Leaves of plants of the new Lemon-scented Geranium were strongly fragrant whereas leaves of plants of 'Pacburg' were not fragrant.
- 4. Plants of the new Lemon-scented Geranium and 'Pacburg' differed slightly in flower color.
- 5. Plants of the new Lemon-scented Geranium had shorter pedicels than plants of 'Pacburg'.

Plants of the new Lemon-scented Geranium have not been observed under all possible environmental conditions and cultural practices. The phenotype may vary somewhat with 35 variations in environment such as temperature 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 'Pacperfu'. These characteristics in combination distinguish 'Pacperfu' 40 the detailed botanical description which accurately describe as a new and distinct Lemon-scented Geranium plant:

BRIEF DESCRIPTION OF THE PHOTOGRAPH

The accompanying colored photograph illustrates the overall appearance of the new Lemon-scented Geranium 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 colors of the new Lemon-scented Geranium plant.

US PP24,347 P2

35

45

3

The photograph comprises a side perspective view of a typical flowering plant of 'Pacperfu' grown in a container.

DETAILED BOTANICAL DESCRIPTION

The aforementioned photograph and following observations, measurements and values describe plants grown in 13-cm containers during the winter, spring and summer in a glass-covered greenhouse in Dresden, Germany and under cultural practices which closely approximate commercial ¹⁰ Lemon-scented Geranium production. During the production of the plants, day temperatures averaged 16° C., night temperatures averaged 14° C. and light levels ranged from 15 kilolux to 100 kilolux. Plants were pinched six weeks after planting and were four months old when the photograph was taken and nine months old when the detailed description was taken. In the detailed description, color references are made to The Royal Horticultural Society Colour Chart, 1995 Edition, except where general terms of ordinary dictionary signifi-20 cance are used. Botanical classification: *Pelargonium crispum* 'Pacperfu'. Parentage: *Female, or seed, parent.*—Unnamed proprietary selection of *Pelargonium crispum*, not patented. 25 Male or pollen parent.—Unnamed proprietary selection of *Pelargonium crispum*, not patented. Propagation: *Type*.—By vegetative terminal cuttings. *Time to initiate roots, summer and winter.*—About three $_{30}$ weeks at temperatures of 20° C.

pattern: Not observed. Petiole: Length: About 2.5 cm. Diameter: About 2 mm. Texture, upper and lower surfaces: Pubescent. Color, upper and lower surfaces: Close to 143A.

4

Flower description:

Flower arrangement and flowering habit.—Single flowers arranged in inversely conical umbels arising from apical leaf axils; umbels displayed above the foliar plane on strong peduncles; flowers face upright to outward; freely flowering habit; about two to three flowers per umbel with about 30 umbels developing per plant.

Time to produce a rooted young plant, summer.—About four weeks at temperatures of 20° C.

Time to produce a rooted young plant, winter.—About

Fragrance.—None detected.

Flowering season.—Early flowering habit, plants begin flowering about four months after planting; in Germany; in the garden, flowering begins in April and continues until frost; plants do not require a cooling treatment for flower initiation and development. *Flower longevity.*—Flowers last about two weeks on the plant; flowers not persistent. *Umbel height.*—About 4 cm. *Umbel diameter.*—About 6 cm. *Flower diameter.*—About 2 cm. *Flower depth (height).*—About 2 cm. *Flower buds.*—Length: About 1 cm. Diameter: About 5 mm. Shape: Spindle-shaped. Color: Close to 146B. *Petals.*—Quantity per flower: Five arranged in a single whorl; two upper and three lower petals; petals imbricate. Length, upper two petals: About 2.7 cm. Length, lower three petals: About 2.5 cm. Width, upper two petals: About 1.9 cm. Width, lower three petals: About 1.3 cm. Shape: Obovate. Apex: Rounded. Base: Cuneate. Margin: Entire. Texture, upper and lower surfaces: Smooth, glabrous; velvety. Color, upper two petals: When opening and fully opened, upper surface: Darker than 59A; narrow margin, close to 76D; venation, darker than 59A. When opening and fully opened, lower surface: Darker than 59A; venation, close to 59C. Color, lower three petals: When opening and fully opened, upper surface: Center, close to 59A; towards the margins, close to 76D; venation, close to 59A and 76D. When opening and fully opened, lower surface: Center, 59A; towards the margins, close to 76D; venation, close to 59A and 76D.

four weeks at temperatures of 18° C. *Root description*.—Fine, fibrous; white in color. *Rooting habit*.—Freely branching; dense. Plant description:

Plant and growth habit.—Upright and uniformly rounded plant habit; broad inverted triangle; densely 40 foliated; moderately vigorous growth habit; freely basal branching habit with about 40 lateral branches developing per plant.

Plant height, to top of umbels.—About 25 cm. Plant height, to top of foliar plane.—About 20 cm. Plant width.—About 40 cm.

Lateral branches.—Length: About 5 cm to 15 cm. Diameter: About 4 mm to 5 mm. Internode length: About 1 cm to 2 cm. Texture: Moderately pubescent. Color: Close to 146B. 50

Foliage description:

- Arrangement.—Alternate or opposite; simple.
- Length.—About 2.5 cm.
- Width.—About 4 cm.

Shape.—Roughly orbicular; palmately lobed. 55
Apex.—Acute.
Base.—Cordate, open.
Margin.—Biserrate.
Venation pattern.—Palmate.
Fragrance.—Strongly fragrant, lemon-scented. 60
Texture, upper surface.—Rough, glabrous.
Texture, lower surface.—Slightly pubescent along veins.
Color.—Developing and fully expanded leaves, upper surface: Close to 137A; venation, close to 137A.
Developing and fully expanded leaves, lower surface: 65
Close to 146B; venation, close to 146B. Zonation

Sepals.—Quantity per flower: Five arranged in a single whorl. Length: About 1.1 cm. Width: About 3 mm to 5 mm. Shape: Lanceolate. Apex: Acute. Margin: Entire. Texture, upper and lower surfaces: Pubescent. Color, upper and lower surfaces: Close to 146C.
Peduncle (umbel stem).—Length: About 2 cm to 3 cm. Diameter: About 2 mm. Strength: Strong, flexible. Angle: Mostly erect to slightly outwardly slanted. Texture: Moderately pubescent. Color: Close to 146B.

Pedicel (individual flower stem).—Length: About 1 cm. Diameter: About 1 mm. Strength: Strong; flexible. Texture: Moderately pubescent. Color: Close to 146B.

Reproductive organs.—Androecium: Stamen quantity per flower: About seven to ten. Anther length: About 2 mm. Anther shape: Tubular. Anther color: Brownish.
Pollen amount: Abundant. Pollen color: Golden brown. Gynoecium: Pistil quantity per flower: One.
Pistil length: About 1.5 cm. Stigma shape: Fiveparted. Stigma color: Close to 59A. Style length:

US PP24,347 P2

5

About 8 mm. Style color: Close to 59A. Ovary color: Greenish. Seeds and fruits: Seed and fruit development have not been observed on plants of the new Lemon-scented Geranium.

Disease & pest resistance: Plants of the new Lemon-scented ⁵ Geranium have not been observed to be resistant to pathogens and pests common to Lemon-scented Geraniums.

Temperature tolerance: Plants of the new Lemon-scented Geranium have been observed to tolerate temperatures ranging from about 1° C. to about 35° C. to 40° C. It is claimed:

6

1. A new and distinct Lemon-scented Geranium plant named 'Pacperfu' as illustrated and described.

* * * * *

U.S. Patent

Mar. 25, 2014 US PP24,347 P2



.