



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

(10) **Patent No.:** **US PP27,174 P2**
(45) **Date of Patent:** **Sep. 20, 2016**

(54) **CARNATION PLANT NAMED ‘HILLUIGI’**

(50) Latin Name: *Dianthus caryophyllus*
Varietal Denomination: **Hilluigi**

(71) Applicant: **Peter Eveleens**, Aalsmeer (NL)

(72) Inventor: **Peter Eveleens**, Aalsmeer (NL)

(73) Assignee: **HILVERDA KOOLJ B.V.**, De Kwakel (NL)

(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 93 days.

(21) Appl. No.: **14/120,582**

(22) Filed: **Jun. 6, 2014**

(51) **Int. Cl.**
A01H 5/02 (2006.01)

(52) **U.S. Cl.**

USPC **Plt./272**

(58) **Field of Classification Search**

USPC **Plt./272, 273**

See application file for complete search history.

Primary Examiner — June Hwu

(74) *Attorney, Agent, or Firm* — C. A. Whealy

(57) **ABSTRACT**

A new and distinct cultivar of Carnation plant named ‘Hilluigi’, characterized by its upright, somewhat outwardly spreading and uniformly mounded plant habit; freely branching habit; freely flowering habit; large orange-colored double flowers that are positioned above and beyond the foliar plane on strong peduncles; and good garden performance.

1 Drawing Sheet

1

Botanical designation: *Dianthus caryophyllus*.
Cultivar denomination: ‘HILLUIGI’.

BACKGROUND OF THE INVENTION

The present invention relates to a new and distinct cultivar of Carnation plant, botanically known as *Dianthus caryophyllus*, grown commercially as a potted and garden plant and hereinafter referred to by the name ‘Hilluigi’.

The new Carnation plant is a product of a planned breeding program conducted by the Inventor in De Kwakel, The Netherlands. The objective of the breeding program is to create new potted Carnation plants that have uniform plant habit and numerous attractive flowers.

The new Carnation plant originated from a cross-pollination made by the Inventor in De Kwakel, The Netherlands in June, 2009 of a proprietary selection of *Dianthus caryophyllus* identified as code number A86044-03, not patented, as the female, or seed, parent with a proprietary selection of *Dianthus caryophyllus* identified as code number A56044-01, not patented, as the male, or pollen, parent. The new Carnation plant was discovered and selected by the Inventor as a single flowering plant from within the progeny of the stated cross-pollination in a controlled greenhouse environment in De Kwakel, The Netherlands in September, 2010.

Asexual reproduction of the new Carnation plant by terminal cuttings propagated in a controlled greenhouse environment in De Kwakel, The Netherlands since October, 2010 has shown that the unique features of this new Carnation plant are stable and reproduced true to type in successive generations of asexual reproduction.

SUMMARY OF THE INVENTION

Plants of the new Carnation have not been observed under all possible combinations of environmental conditions and cultural practices. The phenotype may vary somewhat with variations in environmental conditions such as temperature and light intensity, without, however, any variance in genotype.

2

The following traits have been repeatedly observed and are determined to be the unique characteristics of These characteristics in combination distinguish ‘Hilluigi’ as a new and distinct Carnation plant:

1. Upright, somewhat outwardly spreading and uniformly mounded plant habit.
2. Freely branching habit.
3. Freely flowering habit.
4. Large orange-colored double flowers that are positioned above and beyond the foliar plane on strong peduncles.
5. Good garden performance.

Plants of the new Carnation differ from plants of the female parent selection in the following characteristics:

1. Plants of the new Carnation flower a few days later than plants of the female parent selection.
2. Flower petals of plants of the new Carnation are more incised than flower petals of plants of the female parent selection.
3. Plants of the new Carnation and the female parent selection differ in flower color as plants of the female parent selection have red-colored flowers.

Plants of the new Carnation differ from plants of the male parent selection in the following characteristics:

1. Plants of the new Carnation have shorter lateral branches than plants of the male parent selection.
2. Plants of the new Carnation flower a few days earlier than plants of the male parent selection.
3. Plants of the new Carnation have larger flowers with more petals per flower than plants of the male parent selection.
4. Plants of the new Carnation and the male parent selection differ in flower color as plants of the male parent selection have yellow-colored flowers.

Plants of the new Carnation can be compared to plants of *Dianthus caryophyllus* ‘Bling Bling’, not patented. In side-by-side comparisons conducted in De Kwakel, The Netherlands, plants of the new Carnation differed from plants of ‘Bling Bling’ in the following characteristics:

1. Plants of the new Carnation had shorter lateral branches than plants of 'Bling Bling'.
2. Plants of the new Carnation flowered a few days earlier than plants of 'Bling Bling'.
3. Flower petals of plants of the new Carnation were more rounded than flower petals of plants of 'Bling Bling'.
4. Plants of the new Carnation and 'Bling Bling' differed slightly in flower color.

BRIEF DESCRIPTION OF THE PHOTOGRAPH

The accompanying photograph illustrates the overall appearance of the new Carnation 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 detailed botanical description which accurately describe the colors of the new Carnation plant. The photograph comprises a side perspective view of a typical flowering plant of 'Hilluigi' grown in a container.

DETAILED BOTANICAL DESCRIPTION

Plants used in the aforementioned photograph and following observations and measurements were grown during the late winter and early spring in 10.5-cm containers in a glass-covered greenhouse in De Kwakel, The Netherlands and under cultural practices typical of commercial potted Carnation production. During the production of the plants, day and night temperatures averaged 12° C. and light levels averaged 7 klux. Plants were pinched one time five weeks after planting. Plants used for the description were 20 weeks old and plants used for the photograph were 25 weeks old. In the following description, color references are made to The Royal Horticultural Society Colour Chart, 2007 Edition, except where general terms of ordinary dictionary significance are used.

Botanical classification: *Dianthus caryophyllus* 'Hilluigi'.

Parentage:

Female, or seed, parent.—Proprietary selection of *Dianthus caryophyllus* identified as code number A86044-03, not patented.

Male, or pollen, parent.—Proprietary selection of *Dianthus caryophyllus* identified as code number A56044-01, not patented.

Propagation:

Type.—By terminal cuttings.

Time to initiate roots, summer.—About six days at temperatures about 20° C. to 25° C.

Time to initiate roots, winter.—About eight days at temperatures about 18° C.

Time to produce a rooted young plant, summer.—About three weeks at temperatures about 20° C. to 25° C.

Time to produce a rooted young plant, winter.—About five weeks at temperatures about 18° C.

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

Rooting habit.—Moderate branching; medium density.

Plant description:

Plant type and form.—Herbaceous perennial; upright, somewhat outwardly spreading and uniformly mounded plant habit; broad inverted triangle.

Branching habit.—Freely-branching growth habit; when pinched, about five primary branches develop, each with about three secondary branches; dense and bushy growth habit.

Plant height.—About 14.1 cm.

Plant diameter or spread.—About 19 cm.

Lateral branches.—Length: About 10.1 cm. Diameter: About 3.5 mm. Internode length: About 1.8 cm. Strength: Strong. Texture: Smooth, glabrous; waxy. Color: Close to 137A and N137A; waxy cuticle, close to 189B. Stem shape: Circular. Stem interior: Solid.

Leaf description:

Arrangement.—Opposite, simple; sessile.

Length.—About 8.4 cm.

Width.—About 9 mm.

Shape.—Narrowly oblanceolate to lanceolate.

Apex.—Acute.

Base.—Attenuate, decurrent.

Margin.—Entire.

Texture, upper and lower surfaces.—Smooth, glabrous; waxy.

Venation pattern.—Parallel.

Color.—Developing leaves, upper surface: Close to 137B; towards the base, close to 143C. Developing leaves, lower surface: Close to 137C; towards the base, close to 143C. Fully expanded leaves, upper surface: Close to N137A; waxy cuticle, close to 189A; venation, close to N137B. Fully expanded leaves, lower surface: Close to N137B; waxy cuticle, close to 189A; venation, close to 143A.

Flower description:

Flower type and habit.—Rotate double flowers, flowers typically solitary or occasionally in pairs; freely flowering habit with typically about 35 flowers developing per plant; flowers positioned above and beyond the foliar plane on strong peduncles; flowers face mostly upright to outwardly.

Fragrance.—Moderately fragrant; clove-like, sweet.

Natural flowering season.—Flowering is continuous through the summer and late summer in The Netherlands; plants begin flowering about twelve weeks after planting.

Flower longevity.—Flowers last about ten days on the plant; flowers not persistent.

Flower diameter.—About 4.2 cm.

Flower depth.—About 3.2 cm.

Flower buds.—Length: About 1.6 cm. Diameter: About 1.1 cm. Shape: Obovate; styles not extruded. Color: Close to 137B; base, close to 144A to 144B.

Petals and petaloids.—Quantity and arrangement: About 40 petals and petaloids per flower arranged in numerous whorls. Length: About 2.9 cm. Width: About 1.6 cm. Shape: Spatulate. Apex: Praemorse, slightly crinkled; incisions, medium in quantity and somewhat shallow. Base: Acute. Margin: Entire. Texture, upper and lower surfaces: Smooth, glabrous; velvety. Color: When opening, upper and lower surfaces: Close to 26D; towards the base, close to 2C; at the base, close to 145D. Fully opened, upper surface: Close to 24D; towards the margins, close to 26D; towards the base, close to 3C to 3D; at the base, close to 145D; color does not fade with development. Fully opened, lower surface: Close to 26D; towards the base, close to 2D; at the base, close to 145D.

Sepals.—Quantity and arrangement: Five in a single whorl; proximal 60% of the sepals are fused into a campanulate-shaped calyx; epicalyx, adpressed to calyx, individual segments are deltoid in shape with short acuminate apices. Length: About 1.8 cm. Width: About 7 mm. Shape: Oblong. Apex: Broadly acute.

Margin: Entire. Texture, upper and lower surfaces: Smooth, glabrous. Color: When opening, upper surface: Close to 138C to 138D. When opening, lower surface: Close to 137B; towards the base, close to 144A to 144B. Fully opened, upper surface: Close to 138C to 138D. Fully opened, lower surface: Close to 137B; towards the base, close to 143B.

Peduncles.—Length: About 2 cm. Diameter: About 2.5 mm. Strength: Strong. Aspect: Mostly erect to about 30° from vertical. Texture: Smooth, glabrous; waxy. Color: Close to N137A; waxy cuticle, close to 189B.

Reproductive organs.—Stamens: Quantity: About eight, mostly deformed. Filament length: About 2.2 cm. Filament color: Close to 157D. Anther length: About 2.5 mm. Anther shape: Irregularly oblong. Anther color: Close to 4C. Pollen: None observed. Pistils: Quantity: About two per flower. Pistil length: About 2.2 cm. Stigma shape: Pointed, curved. Stigma

color: Close to N155B. Style length: About 2 cm. Style color: Close to NN155C to NN155D. Style shoulder: None. Ovary color: Close to 144C; towards the base, close to 157D. Ovary shape: Obovate. Ovary texture: Smooth. Fruits and seeds: Fruit and seed development have not been observed on plants of the new Carnation.

Disease & pest resistance: Plants of the new Carnation have not been observed to be resistant to pathogens and pests common to Carnation plants.

Garden performance: Plants of the new Carnation have been observed to have good garden performance and to tolerate wind, rain and temperatures ranging from about 5° C. to about 35° C. and to be hardy to USDA Hardiness Zone 9.

It is claimed:

1. A new and distinct Carnation plant named 'Hilluigi' as illustrated and described.

* * * * *

