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(12) **United States Plant Patent**
Jepsen(10) **Patent No.:** US PP15,838 P2
(45) **Date of Patent:** Jul. 5, 2005(54) **KALANCHOE PLANT NAMED 'CARMEN'**(50) Latin Name: *Kalanchoe blossfeldiana*
Varietal Denomination: **Carmen**(75) Inventor: **Knud Jepsen**, Hinnerup (DK)(73) Assignee: **Knud Jepsen A/S**, Hinnerup (DK)

(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

(21) Appl. No.: **10/837,792**(22) Filed: **May 3, 2004**(51) Int. Cl.⁷ **A01H 5/00**(52) U.S. Cl. **Plt./340**

(58) Field of Search Plt./340

(56) **References Cited**

U.S. PATENT DOCUMENTS

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UPOV ROM GTITM Computer Database, GTI Jouve Retrieval Software 2004/04 Citation for 'Carmen'.*

* cited by examiner

Primary Examiner—Kent Bell*Assistant Examiner*—W. C. Haas(74) *Attorney, Agent, or Firm*—C. A. Whealy(57) **ABSTRACT**

A distinct cultivar of *Kalanchoe* plant named 'Carmen', characterized by its upright plant habit; medium-sized, dark green-colored leaves; red orange-colored flowers; and excellent postproduction longevity.

1 Drawing Sheet

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Botanical designation: *Kalanchoe blossfeldiana*.
Variety denomination: 'Carmen'.

BACKGROUND OF THE INVENTION

The present invention relates to a new and distinct cultivar of *Kalanchoe* plant, botanically known as *Kalanchoe blossfeldiana*, and hereinafter referred to by the name 'Carmen'.

The new *Kalanchoe* is a product of a planned breeding program conducted by the Inventor in Hinnerup, Denmark. The objective of the breeding program was to create new freely-flowering *Kalanchoe* cultivars with compact plant habit, attractive flower coloration and excellent postproduction longevity.

The new *Kalanchoe* originated from a cross-pollination made in Hinnerup, Denmark, in July, 2000 of an unidentified proprietary seedling selection of *Kalanchoe blossfeldiana*, not patented, as the female, or seed, parent with the *Kalanchoe* cultivar Pico, not patented, as the male, or pollen, parent. The new *Kalanchoe* was discovered and selected by the Inventor as a single flowering plant within the progeny of the stated cross-pollination grown in a controlled environment in Hinnerup, Denmark, in May, 2001.

Asexual reproduction of the new *Kalanchoe* by terminal cuttings taken at Hinnerup, Denmark, by the Inventor, has shown that the unique features of this new *Kalanchoe* are stable and reproduced true to type in successive generations.

BRIEF SUMMARY OF THE INVENTION

The cultivar 'Carmen' has not been observed under all 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.

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

1. Upright plant habit.
2. Medium-sized, dark green-colored leaves.
3. Red orange-colored flowers.
4. Excellent postproduction longevity.

Plants of the new *Kalanchoe* are most similar to plants of the parents and differ primarily from plants of the parents in plant form and flower color.

BRIEF DESCRIPTION OF THE PHOTOGRAPHS

The accompanying colored photographs illustrated the overall appearance of the new *Kalanchoe*, showing 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 *Kalanchoe*. The photographs were taken under diffuse natural light conditions on an overcast day at approximately noon in Hinnerup, Denmark.

The photograph at the top of the sheet comprises a side perspective view of a typical potted plant of 'Carmen'.

The photograph at the bottom of the sheet comprises a top perspective view of a typical plant of 'Carmen'.

DETAILED BOTANICAL DESCRIPTION

In the following description, color references are made to The Royal Horticultural Society Colour Chart, 1995 Edition, except where general terms of ordinary dictionary significance are used. Plants used in the photographs and for the following observations and measurements were grown in

Hinnerup, Denmark, under commercial practice in a glass-covered greenhouse for about ten weeks after the start of short day/long night photoperiodic treatment with average temperatures of 20° C. Plants used in the description and photographs were not pinched. Unless otherwise specified, the leaf description represents leaves from a vegetative plant.

Botanical classification: *Kalanchoe blossfeldiana* cultivar 'Carmen'.

Parentage:

Female, or seed, parent.—Unidentified proprietary seedling selection of *Kalanchoe blossfeldiana*, not patented.

Male, or pollen, parent.—*Kalanchoe blossfeldiana* cultivar Pico, not patented.

Propagation:

Type cutting.—Terminal cuttings.

Time to produce a rooted young plant.—About two weeks.

Root description.—Numerous, fine, fibrous, and well-branched.

Plant description:

Form.—Upright plant habit with numerous compound cymes; freely flowering. Actual plant shape will depend on whether or not plants are pinched (apical terminals removed).

Branching habit.—Freely branching. Pinching (removal of terminal apex) is not required but will enhance lateral branch development.

Plant height at flowering.—About 25 cm.

Plant diameter at flowering.—About 20 cm.

Foliage description.—Arrangement: Opposite, simple. Size: Leaf size is reduced after floral induction. Vegetative plants: Length: About 11 cm. Width: About 7 cm. Reproductive plants: Length: About 6 cm. Width: About 3.5 cm. Shape: Oval. Apex: Obtuse. Base: Obtuse. Margin: Crenate; undulate. Aspect: Slightly concave. Texture, upper and lower surfaces: Glabrous; leathery; succulent. Color: Developing foliage, upper surface: 137B. Developing foliage, lower surface: 137C. Fully expanded foliage, upper surface: 147A. Fully expanded foliage, lower surface: 147B.

Flower description:

Flower type and habit.—Single flowers arranged in compound dichasial cymes that arise from leaf axils. Upright flowering stems. Freely flowering. Flowers persistent.

Natural flowering season.—Winter to early spring; flower initiation and development can be induced under short day/long night conditions.

Time to flower.—In the summer with 20° C. growing temperatures, about nine weeks of short day/long night conditions are required to produce flowering plants. During the winter with supplemental lighting and 20° C. growing temperatures, about ten weeks of short day/long night conditions are required to produce flowering plants. Time to flower is primarily dependent upon temperature and light intensity.

Flower opening.—First flower open is the terminal flower at the main axis and is followed by the opening of the terminal flowers of the side branches of the inflorescence. About one week after the first flower has opened, 50% of the remaining flowers are open.

Post-production longevity.—Plants of the new *Kalanchoe* maintain good leaf and flower substance for at least five weeks under interior environmental conditions.

Flower diameter.—About 2 cm.

Quantity.—Freely flowering; primary cymes with about 25 to 40 flowers each.

Flower buds.—Shape: Narrowly oblong. Length: About 1.5 cm. Width: About 4 mm. Color: 26B to 32B.

Petals.—Quantity per flower: Four fused at base. Length: About 9 mm. Diameter: About 7 mm. Shape: Round obovate. Apex: Cuspidate. Margin: Entire. Texture, upper and lower surfaces: Glabrous, smooth; satiny. Color: Upper surface: 30A. Lower surface: 26C to 30B.

Reproductive organs.—Stamens: Stamen number: About eight. Anther shape: Slightly oblong. Filament color: Yellowish green. Pollen color: Yellow. Pistils: Pistil number: About four. Style color: Green. Stigma shape: Round. Ovaries: Superior and four-celled. Ovary size: About 6 mm by 1 mm. Ovary color: Light green.

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

Disease/pest resistance: Resistance to known pathogens and pests common to *Kalanchoe* has not been observed on plants of the new *Kalanchoe* grown under commercial greenhouse conditions.

It is claimed:

1. A new and distinct cultivar of *Kalanchoe* plant named 'Carmen', as illustrated and described.

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