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Madsen

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(54) ***RHIPSALIDOPSIS* PLANT NAMED
'PKMRHIPS04'**

(50) Latin Name: *Rhipsalidopsis*×*hybrida*
Varietal Denomination: **PKMRhips04**

(71) Applicant: **Gartneriet PKM A/S**, Odense N (DK)

(72) Inventor: **Christian Hald Madsen**, Korsør (DK)

(73) Assignee: **Gartneriet PKM A/S**, Odense N (DK)

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patent is extended or adjusted under 35
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A01H 5/02 (2006.01)

(52) **U.S. Cl.**
USPC **Plt./372**

(58) **Field of Classification Search**
USPC Plt./372
See application file for complete search history.

(56) **References Cited**

PUBLICATIONS

Printout of application information from Community Plant Variety
Office (CPVO) website for corresponding CPVO application No.
2013/0755 filed Mar. 4, 2013 (1 page) ([http://www.cpvoextranet.
cpvo.europa.eu](http://www.cpvoextranet.cpvo.europa.eu)).

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Bureau, Ministry of Agriculture, Forestry and Fisheries website for
corresponding Japanese Plant Breeders' Rights application No.
28222 filed May 28, 2013 (1 page). ([http://www.hinsyu.maff.go.jp/
vips2/cmm/apCMM110.aspx?MOSS=1](http://www.hinsyu.maff.go.jp/vips2/cmm/apCMM110.aspx?MOSS=1)).

Primary Examiner — Susan McCormick Ewoldt

(74) *Attorney, Agent, or Firm* — Foley & Lardner LLP

(57) **ABSTRACT**

A new and distinct *Rhipsalidopsis* plant named
'PKMRHIPS04' particularly characterized by its compact
plant habit; dense and bushy plant form; moderate growth rate
and upright growth habit; white colored buds; and large,
upright white flower.

3 Drawing Sheets

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Latin name of the genus and species of the plant claimed:
Rhipsalidopsis×*hybrida*.

Variety denomination: 'PKMRhips04'.

BACKGROUND OF THE INVENTION

The present invention relates to a new and distinct cultivar
of *Rhipsalidopsis*, botanically known as *Rhipsalidopsis*×*hy-*
brida sometimes referred to as *Rhipsalidopsis* Britton et
Rose, including *Epiphylopsis* Berger, commonly known as
either Easter Cactus or Spring Cactus, and hereinafter
referred to by the cultivar name 'PKMRhips04'.

The new *Rhipsalidopsis* cultivar is a product of a controlled
breeding program conducted by the inventor, Christian Hald
Madsen, in Søhus, Denmark.

The new *Rhipsalidopsis* cultivar originated from a cross
made by the inventor in 2006 in Søhus, Denmark. The female
and male parents are unpatented, proprietary *Rhipsalidopsis*×
hybrida cultivars. The new *Rhipsalidopsis* cultivar was dis-
covered and selected by the inventor as a single flowering
plant within the progeny of the stated cross in a controlled
environment in 2010 in Søhus, Denmark. The inventor
selected 'PKMRhips04' on the basis of its flower color and
compact, freely branching, upright growth habit.

Asexual reproduction of the new *Rhipsalidopsis* cultivar
by phylloclade cuttings was first performed in 2010 in Søhus,
Denmark, and has demonstrated that the combination of char-
acteristics as herein disclosed for the new cultivar are firmly
fixed and retained through successive generations of asexual
reproduction. The new cultivar reproduces true to type.

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BRIEF DESCRIPTION OF THE INVENTION

The following traits have been repeatedly observed and are
determined to be unique characteristics of 'PKMRhips04'
which distinguish this *Rhipsalidopsis* as a new and distinct
cultivar:

1. Upright growth habit;
2. Moderately vigorous growth; and
3. Short phylloclades.

Data on the parent cultivars is no longer available for com-
parison with the claimed cultivar.

The most similar commercial cultivar to the instant cultivar
'PKMRhips04' is the *Rhipsalidopsis* cultivar 'Cebemma'
(Patented, U.S. Plant Pat. No. 14,588; CPVO Grant No.
13964). Plants of the instant cultivar 'PKMRhips04' differ
primarily from plants of *Rhipsalidopsis* 'Cebemma' in the
following characteristic:

1. Plants of 'PKMRhips04' have a more upright growth
habit than plants of 'Cebemma', especially seen when
grown as large plants;
2. Plants of 'PKMRhips04' have shorter phylloclades than
plants of 'Cebemma'; and
3. Plants of 'PKMRhips04' are less prone to develop edema
on the phylloclades than plants of 'Cebemma'.
4. Plants of 'PKMRhips04' have a more pronounced purple
color (between RHS 83A and RHS 83B) along the phyl-
loclade margins than plants of 'Cebemma'.

Plants of the instant cultivar 'PKMRhips04' can also be
meaningfully compared to the co-pending *Rhipsalidopsis*
cultivar 'PKMRhips07' (U.S. Plant patent application Ser.
No. 13/986,563). Plants of the instant cultivar 'PKMRhips04'

differ primarily from plants of *Rhipsalidopsis* 'PKMRhips07' in the following characteristics:

1. Plants of 'PKMRhips04' are shorter overall than plants of 'PKMRhips07';
2. Plants of 'PKMRhips04' have flowers which are smaller in diameter than the flowers of 'PKMRhips07';
3. Plants of 'PKMRhips04' have flowers which are shorter than the flowers of 'PKMRhips07';
4. Plants of 'PKMRhips04' have less yellow in the flower buds than plants of 'PKMRhips07';
5. Plants of 'PKMRhips04' have more pronounced purple margins in the phylloclades than plants of 'PKMRhips07'; and
6. Plants of 'PKMRhips04' have styles and anthers at the same height, whereas plants of 'PKMRhips07' have the style placed above the anthers.

BRIEF DESCRIPTION OF THE PHOTOGRAPHS

The accompanying photographs illustrate the overall appearance of the new *Rhipsalidopsis* cultivar 'PKMRhips04' showing the colors as true as is reasonably possible with 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 color of 'PKMRhips04'.

FIG. 1 shows a typical flowering plant of 'PKMRhips04' grown in a 5 cm pot.

FIG. 2 shows a close-up view of typical buds and flowers and a single phylloclade of 'PKMRhips04'.

FIG. 3 shows a comparison of a typical plant of 'PKMRhips04' with a typical plant of the comparison variety 'Cebemma'.

DETAILED BOTANICAL DESCRIPTION

The new *Rhipsalidopsis* cultivar 'PKMRhips04' has not been observed under all possible environmental conditions. The phenotype of the new cultivar may vary with variations in environment such as temperature, light intensity, and day length without any change in the genotype of the plant.

The aforementioned photographs, together with the following observations, measurements and values describe plants of 'PKMRhips04' as grown in a glass-covered greenhouse in Fyn, Denmark, under conditions which closely approximate those generally used in commercial practice, where day temperatures in the greenhouse average 18° C. and night temperatures in the greenhouse average 16° C. Ambient light levels used while growing plants of 'PKMRhips04' are +50 Wm². No growth retardants were used when growing plants of 'PKMRhips04'.

The age of the 'PKMRhips04' plants described is about 10-12 months old and grown in 5 cm pots. The photographs and descriptions were taken during the winter season. Color references are made to The Royal Horticultural Society Colour Chart (R.H.S.), 5th edition, except where general colors of ordinary significance are used.

Classification:

Botanical.—*Rhipsalidopsis* Britton et Rose.

Common name.—Easter Cactus or Spring Cactus.

Variety denomination.—PKMRhips04.

Parentage:

Female or seed parent.—Unpatented, proprietary *Rhipsalidopsis* Britton et Rose cultivar.

Male or pollen parent.—Unpatented, proprietary *Rhipsalidopsis* Britton et Rose cultivar.

Propagation: By phylloclade cuttings.

Time and temperature to initiate roots.—In a greenhouse, about 2 months at 18° C. to 21° C.

Rooting habit and description.—Fine, well-branched.

Plant:

Type.—Perennial, Epiphyte.

Overall shape.—Upright to pendulous.

Form.—Dense and Bushy.

Growth habit.—Branched.

Branching habit.—Three new phylloclades forming at the apical end of older phylloclades. No pinching required.

Growth rate.—Slow.

Vigor.—Moderate.

Crop time.—About 10-12 months are required to produce a finished flowering plant.

Size at maturity.—Height (soil level to top of plant, including flowers): About 7-8 cm. Spread: About 12-15 cm, excluding flowers.

Stem: None, older phylloclades may turn woody with age (several years).

Phylloclade:

Arrangement.—Phylloclades form at the apex of older phylloclades to form branches.

Aspect.—Upright to arching (from basal phylloclade).

Strength.—Strong (from basal phylloclade).

Length.—About 20-35 mm.

Width.—Up to 28 mm.

Overall shape.—Oval.

Apex shape.—Truncate.

Base shape.—Rounded.

Margin.—Crenate. Can be purple, between RHS 83A and RHS83B.

Texture.—Glabrous, smooth.

Pubescence.—Approx. 1-5 hairs up to 4 mm long at areoles along margins.

Color of mature phylloclade.—Upper and lower surfaces: RHS 146A, yellow-green, the central part can be a little brighter.

Venation.—None.

Flower description:

Natural flowering season.—Flowering occurs from February to April (northern hemisphere), but can be changed by short day photo-treatment and cold treatment. Flowers persistent, sessile.

Flowering response time.—About 8 to 9 weeks after end of cold treatment.

Flowering longevity (dependent on temperature and light conditions).—About 5 to 6 days.

Fragrance.—None.

Quantity of flowers per terminal phylloclade.—About 1 to 3.

Quantity of flowers and buds per plant.—About 20 to 25, depending on plant size.

Flower bud.—Length: Ranging from 0 to 25 mm (before anthesis). Width: Ranging from 0 to 1 cm. Shape: Ovoid to lanceolatoid. Color: Larger Buds (over 1 cm): RHS 155A, White. Smaller Buds (up to 1 cm): RHS 155A, White.

Flower.—Type: Single. Shape: Actinomorphic. Aspect: Upright to vertical during development. Persistent or self-cleaning: Persistent. Height: About 3.0 cm to 3.5 cm (including ovary). Diameter: Up to 7.5 cm.

Tepals.—Arrangement: Actinomorphic; not fused. Quantity: 15-20. Length: Ranging from 3 mm to 35

mm. Width: Ranging from 0 mm to 5 mm. Shape: Oblanceolate. Apex: Acute. Base: Apical Whorl: Fused; Basal Whorl: Free. Margin: Entire. Appearance: Matte. Texture: Smooth and Silky. Color (When Opening): Upper and lower surfaces: RHS 155A, White. Color (When Fully Opened): Upper and lower surfaces: RHS NN155C, White. Color does not fade.

Reproductive organs:

Androecium.—Stamen: Quantity: Many (>100). Anther: Shape: Oblong. Length: About 1 mm. Color: RHS 14B, yellow-orange. Filament: Length: 12 mm. Color: RHS 155A, White. Pollen: Amount: Plenty. Color: RHS 14B, yellow-orange.

Gynoecium.—Pistil: Quantity: 1. Stigma: Shape: Ovoid. Color: Between RHS 155A and RHS 155B, white. Style: Length: 12 mm. Color: Base: RHS NN155C, white. Apex: RHS NN155C, white. Ovary: Shape: obdeltoid with a broad base. With ribs. Length: 7 mm. Width: 8 mm. Color: RHS N144B, yellow-green.

Seeds/fruit: None observed.

Disease/pest resistance and susceptibility: Not tested.

Temperature tolerance: Tolerant to a low temperature of about 2° C. and to a high temperature about 40° C.

I claim:

1. A new and distinct *Rhipsalidopsis* plant named ‘PKMRHIPS04’, as illustrated and described herein.

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FIG. 1



FIG. 2

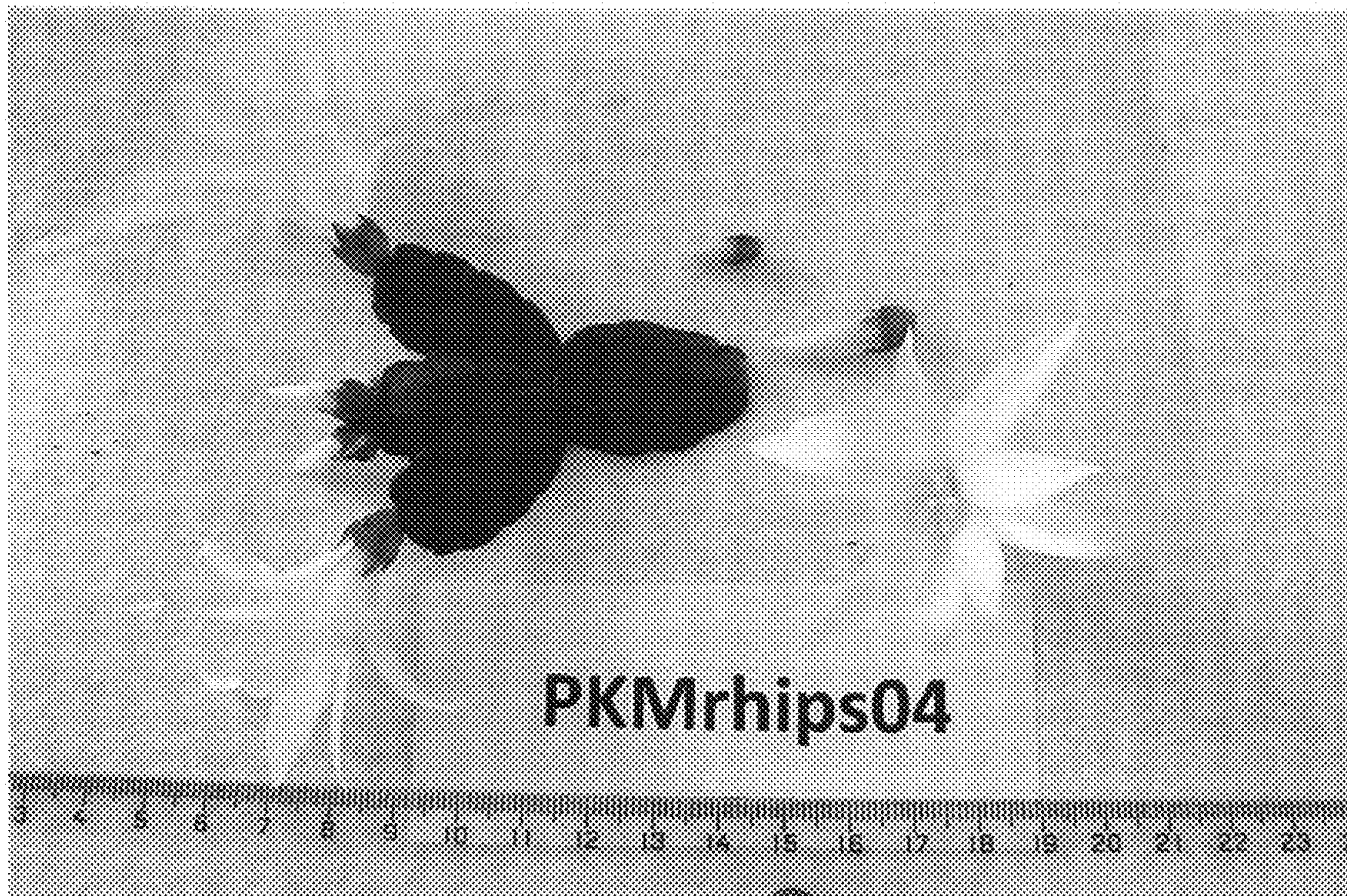


FIG. 3

