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Kawashima et al.

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(54) **OSTEOSPERMUM PLANT NAMED**
'KAKEGAWA AU20'

(50) Latin Name: *Osteospermum hybrida*
Varietal Denomination: **Kakegawa AU20**

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patent is extended or adjusted under 35
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(52) **U.S. Cl.** **Plt./360**

(58) **Field of Classification Search** **Plt./360**
See application file for complete search history.

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(57) **ABSTRACT**

An *Osteospermum* cultivar particularly distinguished by its
creamy yellow color, vigorous growth, plant structure with
minimal branching and earliness to flower.

1 Drawing Sheet

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Genus and species: *Osteospermum hybrida*.
Variety denomination: 'Kakegawa AU20'.

BACKGROUND OF THE NEW PLANT

'Kakegawa AU20' originated from a hybridization of
proprietary hybrid *Osteospermum* breeding line 'G-769'
(unpatented) and proprietary hybrid *Osteospermum* line
'SL-4' (unpatented) in Kakegawa, Japan. The male parent,
'SL-4', has a lemon yellow flower color, a plant growth
habit with less branching and maintains its ability to flower
under high temperature conditions, but does not have toler-
ance to highly humid conditions. The female parent,
'G-769', has a deep yellow flower color and does not bloom
adequately under high temperature conditions.

In 2000, the two *Osteospermum* lines were crossed and 28
ovules were removed from flowers on the female parent and
cultured by standard ovule culture techniques. A total of 3
plantlets were developed. The 3 F₁ hybrid plantlets were
transplanted to soilless media for greenhouse culture and
acclimatization. In 2001, the plants were evaluated and
found to be cream yellow in flower color and to demonstrate
an earliness to flower. Out of the 3 F₁ lines, the breeder
selected line 'K3-102' which has a creamy yellow flower
color, vigorous performance, a plant structure with minimal
branching, is early to flower and maintains its ability to
flower under high temperature conditions.

In fall 2002, the line 'K3-102' was vegetatively propa-
gated with cuttings and re-evaluated in an open field and a
greenhouse. The selection subsequently was named
'Kakegawa AU20' and found to retain its distinctive char-
acteristics through successive asexual propagations in
Kakegawa, Japan and Salinas, Calif.

Plant Breeder's Rights for this cultivar were applied for in
Canada on Mar. 31, 2006.

SUMMARY OF THE INVENTION

The following are the most outstanding and distinguish-
ing characteristics of this new cultivar when grown under
normal horticultural practices in Kakegawa, Japan.

1. Creamy yellow flower color;
2. Vigorous growth;

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3. Plant structure with minimal branching; and
4. Earliness to flower.

DESCRIPTION OF PHOTOGRAPHS

This new *Osteospermum* plant is illustrated by the accom-
panying photographs which show the plant's form, foliage
and flowers. The colors shown are as true as can be reason-
ably obtained by conventional photographic procedures.

FIG. 1 shows overall plant habit.

FIG. 2 shows the mature inflorescence.

DESCRIPTION OF THE NEW CULTIVAR

The following detailed descriptions set forth the distinc-
tive characteristics of 'Kakegawa AU20'. The data which
define these characteristics were collected from asexual
reproductions carried out in Salinas, Calif. Data was col-
lected on plants grown approximately five months from
transplanting rooted cuttings into 6-inch pots under green-
house conditions in Salinas, Calif. Color references are to
the R.H.S. Colour Chart of The Royal Horticultural Society
of London (R.H.S.)

DESCRIPTION OF THE NEW PLANT

Classification:

Family.—Compositae.

Botanical.—*Osteospermum hybrida*.

Parentage:

Female.—Hybrid proprietary *Osteospermum* line
'G-769' (unpatented).

Male.—Hybrid proprietary *Osteospermum* line 'SL-4'
(unpatented).

Growth:

Time to produce a rooted cutting.—Cuttings will colo-
nize a 2.5 cm diameter by 2.5 cm tall greenhouse tray
cell with peat-based plant media in approximately
four weeks. Cuttings are dipped in a normal dilution
(1:9) of DIP 'N GROW root-inducing solution in
water. The trays are misted hourly during rooting.

Environmental conditions for plant growth.—Rooted
cuttings are transplanted to pots with a 16 cm
diameter, one plant per pot. Peat-based growing

media is used. The pots are watered using a 150–200 ppm fertilizer solution containing 18% nitrogen, 8% phosphorus and 18% potassium. The soil is allowed to dry between waterings. During the first few weeks after transplanting, the plants should have evening temperatures around 15–18° C. for good root growth. When plants reach 7.5–10 cm in height they are pinched back to 5–6 leaves to promote branching. Spring and summer daytime high temperatures in Salinas, Calif., where the data was collected, range from 16–25° C.

Time to bloom from propagation.—Approximately four weeks when rooted vegetative cuttings are transferred to a 16-cm. diameter pot. Flowering season is all year in the United States. Vernalization is not required to induce flowering.

Plant Description:

Habit.—Prostrate.

Life cycle.—Perennial.

Form.—Branching.

Height.—30 cm.

Width.—60 cm to 100 cm.

Stems:

Internode length.—2.0 cm.

Stem description.—Strong.

Stem diameter.—0.3 cm to 0.4 cm.

Stem color.—RHS 143C (Green).

Pubescence.—Sparse.

Pubescence shape.—Linear.

Pubescence color.—RHS N155A (White).

Leaves:

Arrangement.—Alternate.

Shape.—Oblanceolate.

Apex.—Acute.

Base.—Decurrent.

Margin.—Serrate.

Venation.—Pinnate.

Surface.—Dull, smooth.

Surface pubescence.—Present.

Length.—5.5 cm to 9.5 cm.

Width.—1.5 cm to 4.0 cm.

Thickness.—0.1 cm.

Color.—Upper surface: RHS 137A (Green). Lower surface: RHS 138B (Green).

Venation color.—Upper surface: RHS 139C (Green). Lower surface: RHS 138B (Green).

Inflorescence:

Type.—Capitulum (head); Disc florets are perfect and ray florets are carpellate.

Flowering habit.—Determinate.

Lastingness of flowers.—3 to 4 days.

Fragrance.—None.

Seed production.—None observed.

Diameter.—7.5 cm to 8.0 cm.

Depth.—1.5 cm to 2.0 cm.

Disc diameter.—0.7 cm to 1.0 cm.

Disc floret number.—55 to 65 per head.

Peduncle length.—20 cm to 30 cm.

Peduncle diameter.—0.2 cm.

Peduncle color.—RHS 138A (Green).

Peduncle texture.—Dull, slight pubescence.

Phyllaries.—Arrangement: 14 per inflorescence, free, arranged symmetrically. Length: 1.0 cm to 1.2 cm. Width: 0.15 cm. Apex: Acute. Margin: Entire. Shape: Linear, acute. Color: Upper surface: RHS 137B (Green). Lower surface: RHS 138B (Green).

Ray florets (Ligules):

Corolla.—One petal per ray floret; only the outer row of florets are the ray florets.

Number of ray florets per inflorescence.—15 to 20.

Petal length.—4.2 cm to 4.5 cm.

Petal width.—0.35 cm to 0.40 cm.

Petal shape.—Spatulate.

Petal apex.—Obtuse with a notched tip.

Petal margin.—Entire.

Petal color.—Upper surface: RHS 6D (Yellow) with RHS 155A (White) base that fades into RHS N79B (Purple) alongside the ray flowers and the very base of the petal. Lower surface: RHS 12C (Yellow) with RHS 167C (Grey-orange) streaks.

Petal pubescence.—Glabrous.

Ovary: Superior.

Pistil form.—One style with two stigma branches.

Pistil length.—0.3 cm.

Stigma color.—RHS N79B (Purple).

Style color.—RHS N80C (Purple-violet).

Disc florets:

Color.—RHS N88A (Violet).

Shape.—Tubular.

Apex.—Rounded.

Surface.—Smooth, shiny.

Size.—Length: 0.4 cm. Width: 0.1 cm.

Pistil form.—One style with two stigma branches.

Ovary: Superior.

Style color.—RHS N80C (Purple-violet).

Stigma color.—RHS N79B (Purple).

Stamens.—5, fused into a single tube.

Anther color.—RHS N79B (Purple).

Pollen color.—RHS 25B (Orange).

Disease and insect resistance: Very disease resistant, however, plants are susceptible to aphids, thrips, whiteflies and worms.

COMPARISON WITH PARENTAL LINES AND KNOWN CULTIVARS

‘Kakegawa AU20’ is a distinct variety of *Osteospermum* owing to its creamy yellow color, vigorous growth, plant structure with minimal branching and earliness to flower. ‘Kakegawa AU20’ is distinguished from its parents primarily by ray floret color and plant growth habit as described in Table 1 below (color references are to The Royal Horticultural Society Colour Chart, 4th edition):

Characteristic	‘Kakegawa AU20’	Male Parent ‘SL-4’	Female Parent ‘G-769’
Ray floret (ligule) color, upper surface:	Creamy yellow	Lemon yellow	Deep yellow
Habit	Less branching	Less branching	Basal branching

‘Kakegawa AU20’ is most similar to the *Osteospermum* plant named ‘Seikilrem’ (U.S. Plant Pat. No. 13,407); however, there are differences as described in Table 2 below (color references are to The Royal Horticultural Society Colour Chart, 4th edition):

TABLE 2

Characteristic	'Kakegawa AU20'	'Seikilrem'
Ray floret (ligule) color, upper surface:	RHS 6d (Yellow) with RHS 155A (White) base that fades into RHS N79B (Purple) alongside the ray flowers and the very base of the petal.	RHS 12A (Yellow) at apex; RHS 12B mid section; RHS 155C towards base (White), band; below white band, RHS 90D to RHS 90B, (band of Purple) main color does not fade with subsequent development

TABLE 2-continued

Characteristic	'Kakegawa AU20'	'Seikilrem'
Habit	Less branching habit, vigorous growth performance	Compact and mounded plant habit; initially upright and then outwardly spreading. Moderately vigorous.

I claim:

1. A new and distinct cultivar of *Osteospermum* plant as shown and described herein.

* * * * *



Fig. 1

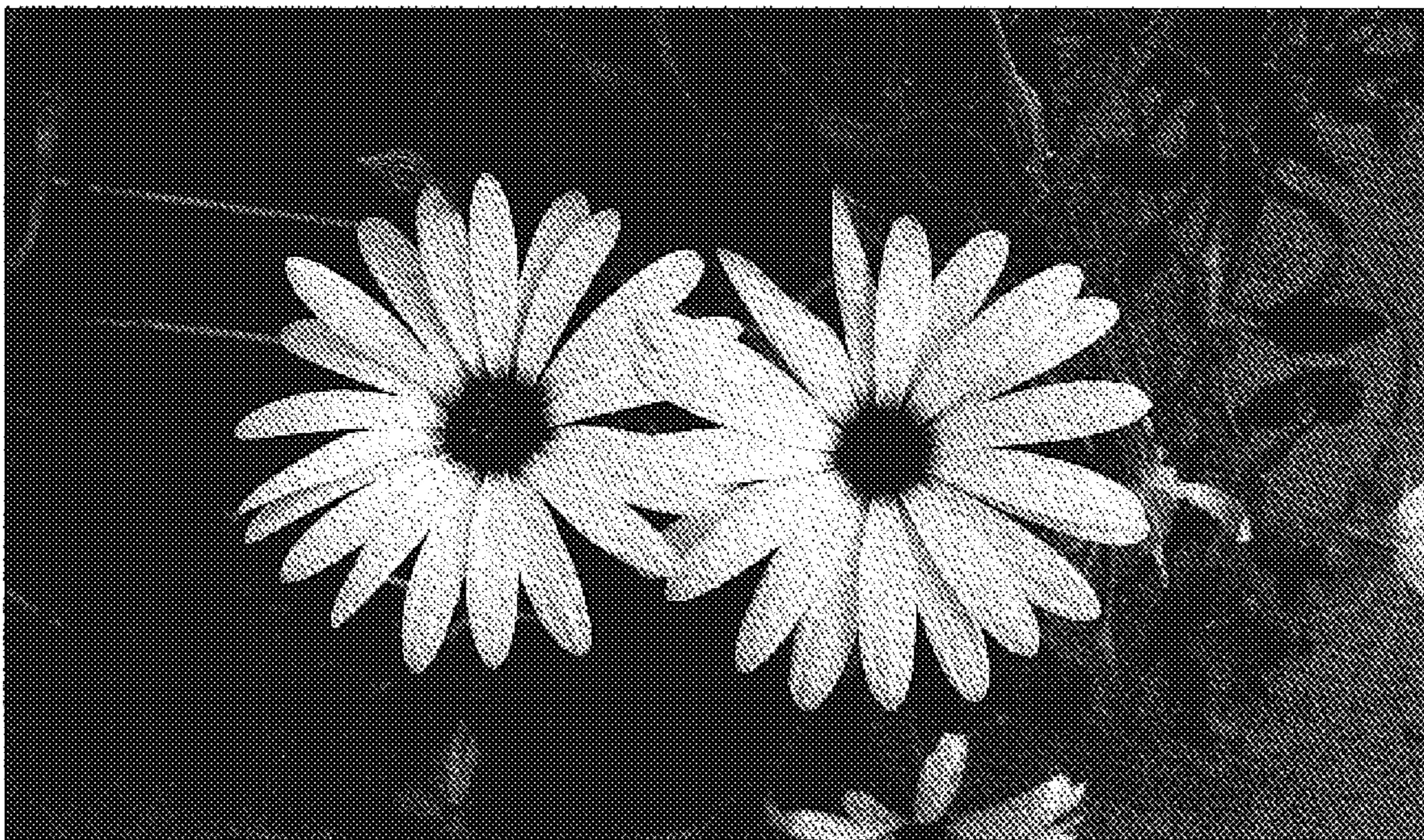


Fig. 2