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Van Rosmalen

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(54) **PHALAEOPSIS ORCHID PLANT NAMED**
‘PHALDUXI’

(50) Latin Name: *Phalaenopsis blume*
Varietal Denomination: **PHALDUXI**

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(57) **ABSTRACT**

A new and distinct variety of *Phalaenopsis* plant named
‘PHALDUXI’, particularly characterized by white flowers
with yellow-white lip with purple stripes, 2 to 3 peduncles, a
short and sturdy inflorescence, a narrow obovate leaf shape,
and propagated by tissue culture is disclosed.

3 Drawing Sheets

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Genus and species: *Phalaenopsis* Blume.
Variety denomination: ‘PHALDUXI’.

BACKGROUND OF THE NEW PLANT

The present invention comprises a new and distinct cultivar
of *Phalaenopsis* plant, botanically known as *Phalaenopsis* of
the Orchidaceae family, and hereinafter referred to by the
cultivar name ‘PHALDUXI’.

Phalaenopsis comprises a genus of about 60 species of
herbaceous perennials many of which, or the hybrids thereof,
are suitable for cultivar in the home or greenhouse.
Phalaenopsis is predominantly epiphytic or rock dwelling,
and is native to tropical Asia, the Malay Archipelago, and
Oceania. The species typically has 2-ranked, fleshy, oblong or
elliptic leaves affixed to a short central stem (monopodial
growth), which vary in size from 12 to 20 cm to over 60 cm.
The leaves may be entirely green or mottled with silver grey.

Phalaenopsis orchids, often referred to as ‘Moth Orchids’
in the horticultural trade, are frequently used to furnish cut
flowers for the florist trade or sold as flowering potted-plants
for home or interiorscape.

Phalaenopsis produces upright or pendent lateral racemes,
often with many showy flowers which open in succession
beginning with the lowermost. The flowers possess three
sepals and three petals; the lateral ones being alike. The
lowermost petals, called the labellum, is three-lobed and is
often more brightly-colored than the other flower segments.
Flower colors include various shades of pink, white, yellow,
and red-brown.

Phalaenopsis orchids are typically propagated from seeds.
Asexual propagation of *Phalaenopsis* is often done from
off-shoots which arise from the lower bracts of the inflores-
cence. The resulting plants are detached from the mother
plants and may be planted in a suitable substrate.

The new *Phalaenopsis* ‘PHALDUXI’ is particularly char-
acterized by its attractive and unique white flowers, economi-
cal propagation by tissue culture, rapid growth, and a plant

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dimension suitable for packaging and shipping to the market
and suitable for both 9 cm and 12 cm pot size.

‘PHALDUXI’ is a product of a planned breeding program
conducted in Bleiswijk, The Netherlands.

5 The new *Phalaenopsis* ‘PHALDUXI’ originated from a
cross made in October 2005 in Bleiswijk, The Netherlands.
The female parent is a white *Phalaenopsis* pot plant named
‘23266-02’ (unpatented), while the male parent is a white
Phalaenopsis pot plant named ‘11968-04’ (unpatented). A
10 single plant was selected in January 2009 and has been asexu-
ally reproduced repeatedly by tissue culture in Bleiswijk, The
Netherlands over a 4-year period. The new variety has been
found to retain its distinctive characteristics through succes-
sive asexual propagations.

15 Asexual reproduction of ‘PHALDUXI’ by tissue culture
was first performed in October 2011 in Bleiswijk, The Neth-
erlands and has demonstrated that the new cultivar is firmly
fixed and retained through successive generations of asexual
reproduction.

20 Plant Breeder’s Rights for this variety have been applied
for in Europe on Jan. 15, 2013. ‘PHALDUXI’ has not been
made publicly available or sold anywhere in the world more
than one year prior to the filing date of this application.

SUMMARY OF THE INVENTION

The following are the most outstanding and distinguishing
characteristics of this new cultivar when grown under normal
horticultural practices in Bleiswijk, The Netherlands.

- 30 1) White flower with yellow-white lip with purple stripes;
2) 2 to 3 peduncles;
3) Inflorescence is short and sturdy;
4) The shape of the leaf is narrow obovate; and
5) Plants are propagated by tissue culture.

DESCRIPTION OF THE PHOTOGRAPHS

35 This new *Phalaenopsis* plant is illustrated by the accom-
panying photographs which show the overall plant habit

including blooms, buds and foliage of the plant; the colors shown are as true as can be reasonably obtained by conventional photographic procedures. The photographs are of a 40-week old plant grown in a greenhouse in Bleiswijk, The Netherlands in May 2013.

FIG. 1 shows the overall plant habit, including blooms, buds and foliage of 'PHALDUXI'.

FIG. 2 shows a close-up of the flower of 'PHALDUXI'.

FIG. 3 shows a close-up of the leaves of 'PHALDUXI'.

DESCRIPTION OF THE NEW VARIETY

The following detailed description sets forth the distinctive characteristics of 'PHALDUXI'. The data which define these characteristics were collected from asexual reproductions carried out in Bleiswijk, The Netherlands. The plant history was taken on 40-week old plants which were planted from tissue culture in 9 centimeter pots and grown in a greenhouse between 27° C. to 29° C. for 20 weeks, continued by a cooling period of 8 weeks between 18° C. to 20° C. and 12 weeks in a greenhouse of 21° C. Observations were made in May 2013. Color readings were taken under 5000 lux natural light in the greenhouse. Color references are primarily to The R.H.S. Colour Chart of The Royal Horticultural Society of London (R.H.S.) (2001).

DETAILED BOTANICAL DESCRIPTION

Classification:

Family.—Orchidaceae.

Botanical.—*Phalaenopsis* Blume.

Common name.—*Phalaenopsis*.

Variety name.—'PHALDUXI'.

Parentage:

Female parent.—*Phalaenopsis* cultivar '23266-02' (unpatented).

Male parent.—*Phalaenopsis* cultivar '11968-04' (unpatented).

Propagation:

Type.—Tissue culture.

Plant:

Crop time (time to produce a finished flowering plant).—38 to 40 weeks for a 9 cm pot and 48 to 50 weeks for a 12 cm pot.

Growth habit of inflorescence.—Standard type, green leaves and panicle.

Height (including pot, including inflorescence).—30.0 cm to 40.0 cm.

Width (measured from leaf tips).—24.0 cm to 26.0 cm.

Vigor.—Moderate.

Roots:

Root description.—Grey-green-colored roots with light branching lateral roots having grey-green-colored root tips.

Leaves:

Mature leaves.—Quantity per plant: 6 to 9 leaves are produced before flowering. Length (fully expanded): 10.0 cm to 14.0 cm. Width: 5.0 cm to 6.0 cm. Shape: Narrow obovate. Apex: Mucronate. Leaf blade angle with the petiole: Between 5 degrees and 15 degrees. Leaf margin: Entire. Color: Upper surface: RHS 147A. Lower surface: RHS 137B. Texture: Smooth. Thickness: 2.0 mm. Venation: Pattern: Parallel. Color of the midvein: Upper surface: RHS 139A. Lower surface: RHS 137A.

Peduncle:

Quantity per plant.—2 to 3.

Number of flowers per peduncle.—14 to 20.

Length.—28.0 cm.

Diameter.—About 0.4 cm.

Strength.—Moderate.

Aspect.—Upright.

Texture.—Smooth.

Color.—Green (RHS 137B).

Internode length.—50.0 mm to 70.0 mm.

Inflorescence description:

Appearance.—Upright to slightly pendant, panicle inflorescence with bilaterally symmetrical flowers that open in succession beginning with the lowermost flower.

Inflorescence size.—Height (from base to tip): 30.0 mm to 50.0 mm. Diameter: 100.0 mm to 140.0 mm.

Flowering time.—First flowers can be expected 7 to 8 months after planting in a 9 cm pot and 10 to 11 months after planting in a 12 cm pot.

Flower.—Height: 52.0 mm to 54.0 mm. Diameter: 56.0 mm to 58.0 mm. Depth of lip: 16.0 mm to 18.0 mm.

Flower longevity.—On the plant: 9 to 11 weeks.

Fragrance.—Absent.

Petals.—Arrangement: Open. Shape: Semi-circular. Apex: Mucronate and symmetric. Margin: Slightly undulate. Length: 28.0 mm to 30.0 mm. Width: 28.0 mm to 30.0 mm. Color (when fully opened): Main color: White (RHS 155C). At the base: White (RHS 155C).

Dorsal sepal.—Shape: Elliptic. Length: 26.0 mm to 28.0 mm. Width: 14.0 mm to 16.0 mm. Color (when fully opened): Main color: White (RHS 155C). At the base: White (RHS 155C).

Lateral sepals.—Shape: Ovate. Length: 26.0 mm to 28.0 mm. Width: 16.0 mm to 18.0 mm. Color (when fully opened): Main color: White (RHS 155C). At the base: White with purple spots (RHS 155C; 78C).

Labellum (lip).—Margin: Entire. Length: 12.0 mm to 14.0 mm. Width: 13.0 mm to 15.0 mm.

Lateral lobe.—Shape: type V. Color: White with a touch of yellow and purple stripes (RHS 155C; 6C; 60B).

Apical lobe.—Shape: Obdeltoid. Color: White with a yellow shade (RHS 155C; 6C).

Callus.—Color: Yellow with purple dots (RHS 14A; 60B).

Reproductive organs:

Arrangement.—The stamens, style and stigmas are fused into a single, short structure called the column, possessing one terminal anther with pollen grains united into pollinia, which are covered by an anther cap. The stigma is located under the column behind the pollinia. The ovary is inferior with three carpels present.

Column.—Length: 7.0 mm to 9.0 mm. Diameter: 4.0 mm to 5.0 mm. Color: White (RHS 155C).

Pollinia.—Quantity: 2. Size: 0.8 mm to 0.9 mm. Color: Orange (RHS 23A).

Ovary.—Length: 8.0 mm to 9.0 mm. Diameter: 3.0 mm to 4.0 mm.

Pedicel.—Length: 23.0 mm to 25.0 mm. Diameter: 2.0 mm to 3.0 mm.

Disease, pest, and stress resistance: No specific resistance or susceptibility observed.

Temperature tolerance: Tolerant to a low temperature of 15° C. and a high temperature about 30° C.

COMPARISON WITH COMMERCIAL
VARIETIES

Presently there is no commercial cultivar to which
‘PHALDUXI’ can be meaningfully compared.

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I claim:

1. A new and distinct variety of *Phalaenopsis* plant named
‘PHALDUXI’ as illustrated and described herein.

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FIG. 1

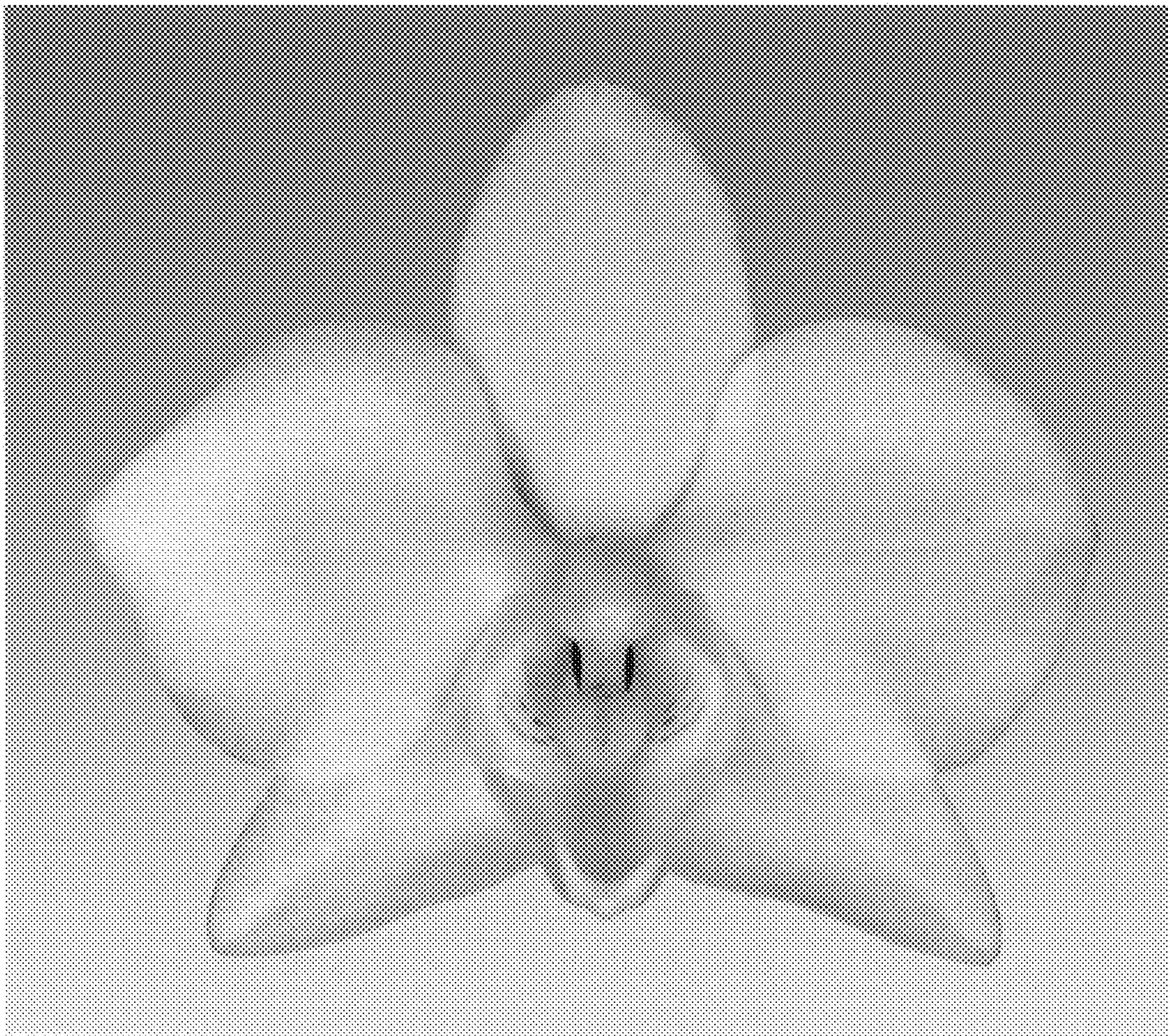


FIG. 2

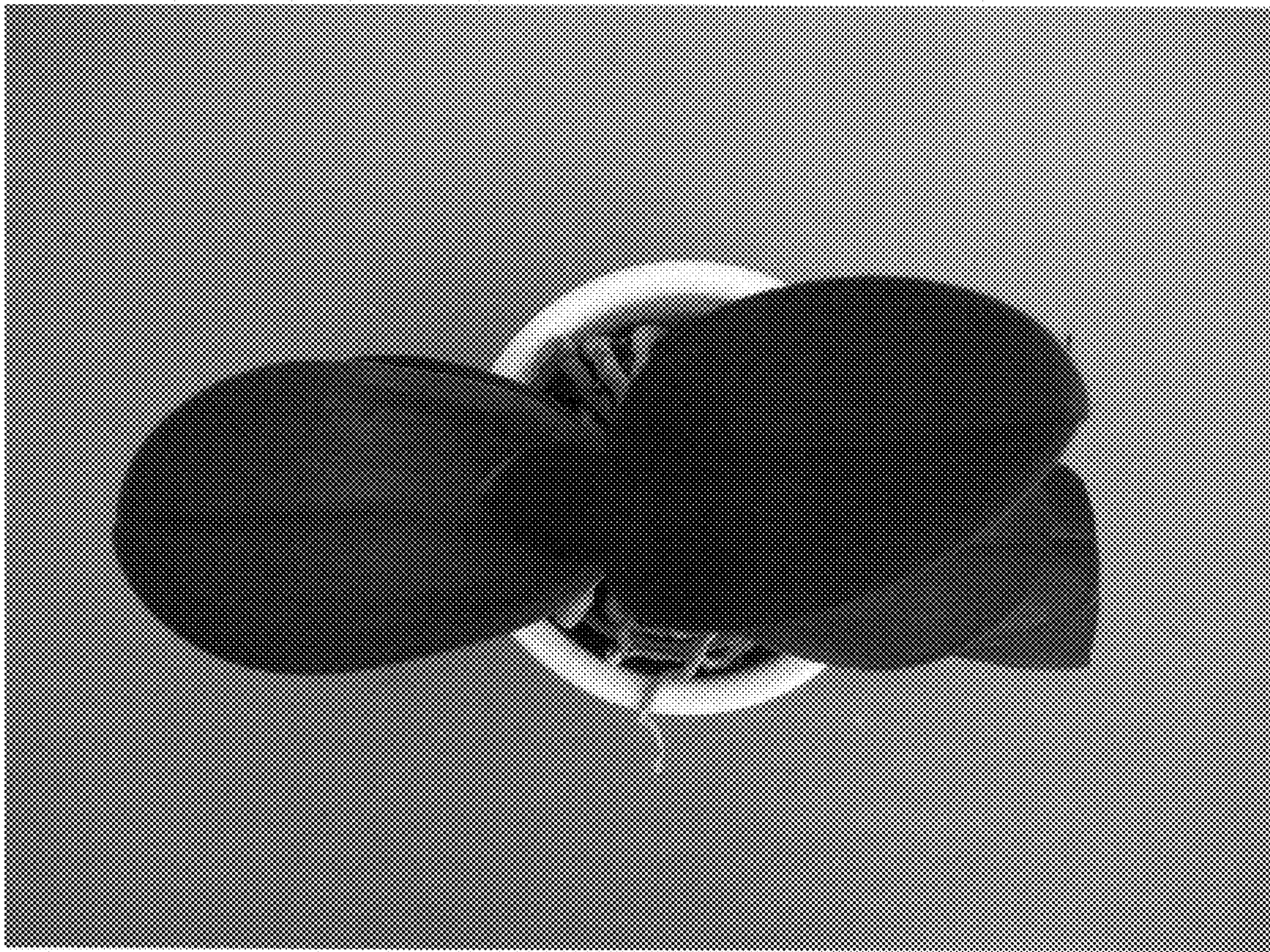


FIG. 3