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Van Swieten

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

(50) Latin Name: *Phalaenopsis* Blume
Varietal Denomination: **PHALDESXEN**

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(57) **ABSTRACT**

A new and distinct variety of *Phalaenopsis* plant named
‘PHALDESXEN’, particularly characterized by purple-lilac
spotted flowers that are a little bit striped, 2 peduncles, inflo-
rescence that is long and moderate, oblong shaped leaves, and
propagated by tissue culture is disclosed.

3 Drawing Sheets

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

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 ‘PHALDESXEN’.

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
or panicle, often with many showy flowers which open in
succession beginning with the lowermost. The flowers pos-
sess 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* ‘PHALDESXEN’ is particularly
characterized by its attractive and unique purple-lilac flowers,

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economical propagation by tissue culture, rapid growth, and a
plant dimension suitable for packaging and shipping to the
market.

‘PHALDESXEN’ is a product of a planned breeding pro-
gram conducted in Bleiswijk, The Netherlands.

The new *Phalaenopsis* ‘PHALDESXEN’ originated from
a cross made in May 2005 in Bleiswijk, The Netherlands. The
female parent is a cream spotted *Phalaenopsis* pot plant
named ‘01-5017’ (unpatented), while the male parent is a
purple *Phalaenopsis* pot plant named ‘22791-0004’ (unpat-
ented). A single plant was selected in January 2008 and has
been asexually reproduced repeatedly by tissue culture in
Bleiswijk, The Netherlands over a 3-year period. The new
variety has been found to retain its distinctive characteristics
through successive asexual propagations.

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

Plant Breeder’s Rights for this variety have been applied
for in Europe on Apr. 25, 2014. ‘PHALDESXEN’ 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.

- 1) Purple-lilac spotted flowers that are a little bit striped;
- 2) 2 peduncles;
- 3) Inflorescence is long and moderate;
- 4) The shape of the leaf is oblong; and
- 5) Plants are propagated by tissue culture.

DESCRIPTION OF THE PHOTOGRAPHS

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 50-week old plant grown in a greenhouse in Bleiswijk, The Netherlands in March 2014.

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

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

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

DESCRIPTION OF THE NEW VARIETY

The following detailed description sets forth the distinctive characteristics of 'PHALDESXEN'. The data which define these characteristics were collected from asexual reproductions carried out in Bleiswijk, The Netherlands. The plant history was taken on 50-week old plants which were planted from tissue culture in 12 centimeter pots and grown in a greenhouse between 27° C. to 29° C. for 30 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 March 2014. Color readings were taken under 4-6000 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.) (1995).

DETAILED BOTANICAL DESCRIPTION

Classification:

Family.—Orchidaceae.

Botanical.—*Phalaenopsis* Blume.

Common name.—*Phalaenopsis*.

Variety name.—'PHALDESXEN'.

Parentage:

Female parent.—*Phalaenopsis* cultivar '01-5017' (unpatented).

Male parent.—*Phalaenopsis* cultivar '22791-0004' (unpatented).

Propagation:

Type.—Tissue culture.

Plant:

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

Growth habit of inflorescence.—Standard, green leaves, raceme to panicle.

Height (including pot, including inflorescence).—60.0 cm to 65.0 cm.

Width (measured from leaf tips).—28.0 cm to 33.0 cm.

Vigor.—Moderate.

Roots:

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

Leaves:

Mature leaves.—Quantity per plant: 6 to 7 leaves are produced before flowering. Length (fully expanded): 14.0 cm to 17.0 cm. Width: 8.0 cm to 9.0 cm. Shape: Oblong. Apex: Unequal mucronate. Leaf blade angle with the petiole: Between 10 degrees and 25 degrees. Leaf margin: Entire. Color: Upper surface: RHS 146A. Lower surface: RHS 146B. Texture: Slightly rough. Thickness: 2.7 mm to 3.0 mm. Venation: Pattern: Parallel. Color of the midvein: Upper surface: At the base RHS 187B; towards the apex RHS 146A. Lower surface: RHS 177A.

Peduncle:

Quantity per plant.—1 to 2.

Number of flowers per peduncle.—5 to 9.

Length.—50.0 cm to 54.0 cm.

Diameter.—4.9 mm.

Strength.—Moderate.

Aspect.—Upright.

Texture.—Slightly rough.

Color.—Green and slightly purple (RHS 146B and 187B).

Internode length.—40.0 mm to 50.0 mm.

Inflorescence description:

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

Inflorescence size.—Height (from base to tip): 150.0 mm to 200.0 mm. Diameter: 4.2 mm to 4.4 mm.

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

Flower.—Height: 80.0 mm to 85.0 mm. Diameter: 85.0 mm to 90.0 mm. Depth of lip: 18.0 mm to 20.0 mm.

Flower longevity.—On the plant: 17 weeks.

Fragrance.—Absent.

Petals.—Arrangement: Open. Shape: Between ovate and semi-circular. Apex: Emarginated and a little bit asymmetric. Margin: Entire. Length (from base to tip): 39.0 mm to 41.0 mm. Width: 35.0 mm to 37.0 mm. Color (when fully opened): Main color: Purple-lilac (Pattern is between RHS 78A and 72A; over color is RHS 78C). At the base: Purple-lilac (Pattern is between RHS 78A and 72A; over color is RHS 78C).

Dorsal sepal.—Shape: Elliptic. Margin: Entire. Length (from base to tip): 41.0 mm to 43.0 mm. Width: 31.0 mm to 33.0 mm. Color (when fully opened): Main color: Purple-lilac (Pattern is between RHS 78A and 72A; over color is RHS 78C). At the base: Purple-lilac (Pattern is between RHS 78A and 72A; over color is RHS 78C).

Lateral sepals.—Shape: Ovate. Margin: Entire. Length (from base to tip): 42.0 mm to 44.0 mm. Width: 25.0 mm to 27.0 mm. Color (when fully opened): Main color: Purple-lilac (Pattern is between RHS 78A and 72A; over color is RHS 76B). At the base: Purple-lilac (Pattern is between RHS 78A and 72A; over color is RHS 76B).

Labellum (lip).—Margin: Entire. Length: 19.0 mm to 21.0 mm. Width: 19.0 mm to 21.0 mm.

Lateral lobe.—Shape: type IV. Color: Purple, white and red (RHS 78A, 59A and 155C).

Apical lobe.—Shape: Rhombic. Color: Purple-red (RHS 78A and 59B).

Callus.—Color: Dark purple (RHS 187A).

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: 11.0 mm to 13.0 mm. Diameter: 4.5 mm to 5.0 mm. Color: Lilac (RHS 78A).

Pollinia.—Quantity: 2. Size: 1.0 mm to 1.2 mm. Color: Orange (RHS 26A).

Ovary.—Length: 8.3 mm to 8.5 mm. Diameter: 5.1 mm to 5.3 mm.
Pedicel.—Length: 42.0 mm to 47.0 mm. Diameter: 3.1 mm to 3.4 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 PARENTAL AND
COMMERCIAL VARIETIES

‘PHALDESXEN’ differs from male parent ‘01-5017’ (unpatented) in that ‘PHALDESXEN’ has an oblong shaped leaf, whereas ‘01-5017’ has a lanceolate shaped leaf. Additionally,

‘PHALDESXEN’ has a dark purple callus of the lip and the pattern of the flower is spotted and a little bit striped, whereas ‘01-5017’ has a yellow dotted callus of the lip and the pattern of the flower is edged.
‘PHALDESXEN’ differs from commercial variety ‘PHALEQEF’ (unpatented) in that ‘PHALDESXEN’ has a lateral lobe that is type IV, whereas ‘PHALEQEF’ has a lateral lobe that is type V. Additionally, ‘PHALDESXEN’ has a dark purple callus and a flower color that is purple-lilac spotted and a little bit striped, whereas ‘PHALEQEF’ has a yellow callus and a flower color that is even purple.
I claim:
1. A new and distinct variety of *Phalaenopsis* plant named ‘PHALDESXEN’ as shown and described herein.

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FIG. 1

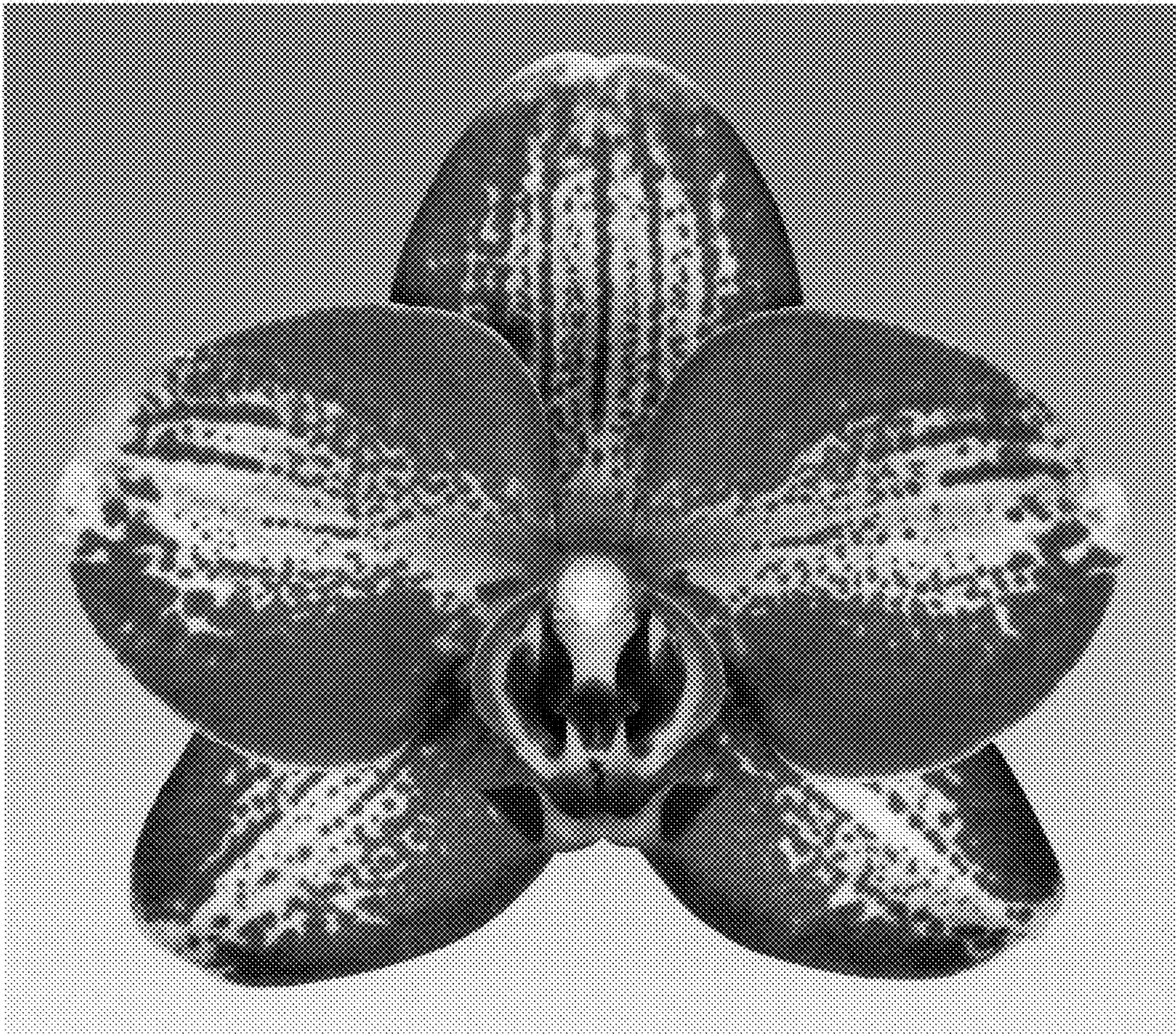


FIG. 2

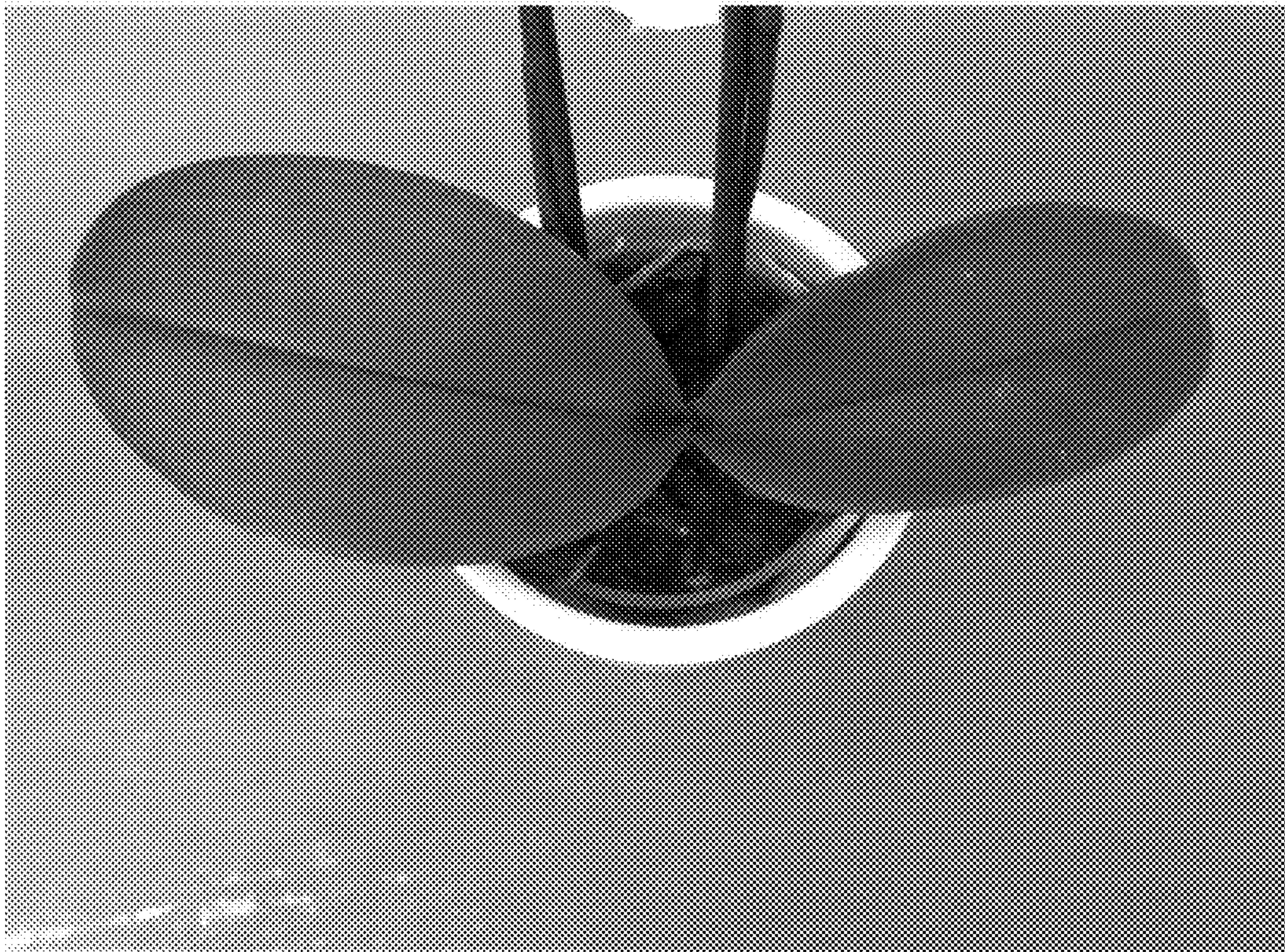


FIG. 3