



US00PP12024P2

(12) **United States Plant Patent**
Lim et al.

(10) **Patent No.:** **US PP12,024 P2**

(45) **Date of Patent:** **Jul. 31, 2001**

(54) **PEACH TREE NAMED 'STAR LIGHT'**

(76) Inventors: **Jung-Kyoung Lim; Soon-Ja Im You,**
both of 637-1 Woulhari, Seomyun,
Yunkikun, Chungnam (KR)

(*) 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.: **09/217,600**

(22) Filed: **Dec. 21, 1998**

(51) **Int. Cl.**⁷ **A01H 5/00**

(52) **U.S. Cl.** **Plt./196**

(58) **Field of Search** **Plt./196, 195**

(56) **References Cited**
PUBLICATIONS

Hanson et al. Topaz: A New Peach From Missouri, Hort-
Science, vol. 13(3), p. 261, Jun. 1978.*

* cited by examiner

Primary Examiner—Bruce R. Campell

Assistant Examiner—Melissa L. Kimball

(74) *Attorney, Agent, or Firm*—Gilberto M. Villacorta;
Pepper Hamilton LLP; Paul D. Roath

(57) **ABSTRACT**

A new and distinct variety of peach *Prunus persica* tree with
the following combination of unique features that are desir-
able in a new variety.

1. Heavy and regular production of fruit.
2. Production of very firm, white flesh fruit with good
handling and shipping quality.
3. Fruit that will stay firm on the tree 10 to 13 days after
maturity (shipping ripe).
4. Fruit with excellent flavor and eating quality.
5. Middle season maturity of white flesh fruit.
6. Fruit skin pink overspread with light yellow.
7. Vigorous half-open growth.

2 Drawing Sheets

1

BACKGROUND OF VARIETY

In the country of origin, Republic of Korea, the tree of this
disclosure is believed to have been derived from the Korean
commercial variety 'Daigubo', which came from Japan in
the 1930's and is within the subspecies 'dianthiflora'
(Dipp.); and originated in Seomyun, Yunkikun, Chungnam,
Republic of Korea. The appropriate botanical classification
for this tree is believed to be *Prunus persica*. This subject
tree is believed to be exceptional in a number of character-
istics and offers a further option to commercial growers of
stone fruits in terms of fruit having large to very large size,
firm flesh, freestone, sweet, attractively colored fruit which
has a comparatively high capacity to withstand handling,
shipping and storage. The tree has the additional desirable
fruit characteristics of heavy production of fruit with an
attractive round shape and pleasant, sweet taste, and which
is harvested later than normal harvest for fruit of extra large
size, this tree promises to be a valuable new variety to
industry and commerce which has value as a dessert variety
but which may also be used as a canner. This tree further has
the advantage of being mid to late-season in blooming so
that it is less susceptible to late frosts than other locally
adapted tree varieties. We are not aware of varieties which
offer a similar or comparable combination of characteristics.

ORIGIN OF THE VARIETY

The new tree was selected from among several thousand
seedling from 'Daigubo' variety, which had been planted on
our farm in Seomyun, Yunkikun, Chungnam, Korea. The
seedling was discovered near a specimen of the noted
apparent seed parent, which is an late season variety and
which normally ripens between August 22 to September 5.
Our attention was drawn to this tree when we noticed that
the skin of the fruit was very smooth; producing regular
form and sweeter by about 1 to 2°(Bx) than the fruit of the

2

parent 'Daigubo' variety on the wood. Although the present
variety has been originated from 'Daigubo', the ripening
season is almost the same as the variety of 'Yumyeong'.
Based on these observations, we selected the variety for
asexual reproduction and commercialization.

ASEXUAL REPRODUCTION OF THE VARIETY

Asexual reproduction of the new and distinct variety was
performed by budding or grafting in our orchard located in
Seomyun, Yunkikun, Chungnam, Korea and shows that all
characteristics run true to the original tree and are estab-
lished and transmitted through succeeding propagation.

SUMMARY OF THE VARIETY

The present new and distinct variety of peach tree has
been denominated 'Star Light', and the height of the fully
grown tree about 3.0 to 3.5 meters, which is almost same as
that of the tree, 'Daigubo'. The diameter of the new tree is
about 5 to 7 meters. This tree grows vigorously on standard
peach rootstock with a half-open shape with short to
medium branches and a regular and productive bearer of
extra large, skin with pink overspread with light yellow,
white flesh, freestone fruit with a mild, sweet subacidic
flavor with excellent eating and stock quality. The fruit is
further characterized by having very firm flesh, the ability to
hang on the tree 10 to 13 days after maturity (shipping ripe),
having good handling and shipping quality and ripening in
the middle maturity season, approximately 15 to 20 days
after 'Daigubo', and approximtely the same as 'Yumyeong',
which are established commercial varieties in Korea.

DESCRIPTION OF THE PHOTOGRAPHS

FIG. 1 shows typical specimens of the fruit of the new and
distinct peach variety; and typical leaf from the tree, 'Star

Light'. The illustrations show an exterior of the fruit and a fruit divided in its suture plane to reveal flesh coloration, pit cavity, and a stone remaining in place. The photographic illustration was taken shortly after being picked (firm ripe);

FIG. 2 shows a peach tree 'Star Light'. The photographic illustration was taken after almost leaves was fallen;

FIG. 3 depicts the comparative picture of sprouts between the parent tree 'Daigubo' and the present tree 'Star Light'.

FIG. 4 depicts the comparative picture of sprouts between the tree 'Yumyeong' and the present tree 'Star Light'.

The colors in the photographs are as nearly true as is reasonably possible in a color representation of this type.

DESCRIPTION OF THE VARIETY

The following is a detailed botanical description of the new and distinct variety of peach tree, its flowers, fruit and foliage as based on observations of the specimen grown in our orchard located Seomyun, Yunkikun, Chungnam, Korea, with color terminology (except those in common terms) in accordance with PANTON® Professional Color System Selector (Pantone, Inc., 1984, 1990).

Tree:

Size.—Large.

Vigor.—Vigorous. Having terminal growth of 1.5 to 2 meters per year, with the growth of the trunk terminating at the height of 5 to 7 meters in 3 or 4 years, in Chungnam, Korea.

Form.—Usually pruned to half open shape. The new peach tree grows 1.5 to 2 meters every year from the first to the third year, with the trunk terminating at about 5 to 7 meters height and then the trunk thickening every year, and the branches extending upwardly at an angle of 40 to 55°, growing 1.5 meters to 2 meters a year to a maximum extent of 3 to 3.5 meters. Almost the same branching as the parent tree 'Daigubo'. To obtain large fruit, about 80% to 90% pruning of the flowers is necessary.

Production.—Productive (300 kg/10a).

Bearing.—Regular.

Density.—Medium dense.

Trunk:

Size.—Medium to stocky.

Texture.—Smooth.

Color.—Brown (18-1124) to (18-1222).

Branches:

Size.—Medium.

Texture.—Varies from smooth to medium rough with maturity.

Lenticels.—Medium size. Medium number.

Color.—Brown (18-1031) to (18-1130) having small parts with light green (16-6329) to (16-6339).

Leaves:

Size.—Medium to large. The shape and size are almost the same as those of 'Daigubo' variety.

Average length.—14 to 16.5 cm.

Average width.—2.5 to 2.7 cm.

Form.—Lanceolate-pointed.

Texture.—Smooth.

Thickness.—Medium.

Margin.—Crenate.

Petiole.—Medium length. Medium thickness.

Glands.—Reniform. Number varies from 0 to 5. Average number 2. Located on base of leaf blade and upper portion of petiole.

Color.—Upper surface green to dark green (18-01117) to (18-0322). Lower surface dull green to grayish green (17-6319) to (17-0119).

Flower buds:

Size.—Medium.

Form.—Plump.

Length.—Medium.

Pubescence.—Pubescent.

Flowers:

Size.—Medium — non-showy.

Blooming period.—This variety has the same flowering period as the 'Daigubo' peach tree. The tree is self-fertile and so it does not require artificial pollination.

Color.—Pink.

Pollen.—Abundant.

Fruit:

Maturity when described.—Firm ripe.

Date of first picking.—Aug. 20, 1998.

Date of last picking.—Sep. 5, 1998.

Size.—Extra large. Average diameter axially 8.5 to 12.5 cm. Average transversely in suture plant 8.0 to 12.0 cm.

Form.—Globose — slightly tip at apex and slightly flattened on stem end. The fruit is exceptionally symmetrical.

Suture.—Shallow but pronounced, extends from base to apex.

Ventral surface.—Nearly rounded, very slightly lipped.

Apex.—Varies from rounded to slight pistil point.

Base.—Retuse.

Cavity.—Rounded to slightly elongated in suture plane.

Average depth — 1.5 cm. Average breadth 2.0 cm.

Average Saccharinity.—12° Bx. Maturity is confirmed by appearance. Stone is apart from the inner flesh and about 1 mm and so if knocking on it, resonance sound is heard as like well-ripened watermelon.

Skin:

Thickness.—Medium.

Texture.—Tenacious to flesh.

Tendency to crack.—None.

Down.—Moderate amount, short to very short in length.

Color.—Pink (17-1654) to (17-1562). Overspread with light yellow.

Flesh:

Texture.—Very firm.

Ripens.—Evenly.

Fibers.—Small, tender.

Juice.—Moderate.

Flavor.—Excellent, mild, very sweet.

Aroma.—Moderate.

Eating quality.—Excellent.

Amygdalin.—Undetected.

Color.—White to milky white (no Pantone number) to (11-0507).

Stone:

Type.—Freestone.

Size.—Large. Average length 2.7 cm. Average width 2.6 cm. Average thickness 1.7 cm.

Form.—Ovoid.

Base.—Mostly straight — some rounded.

Apex.—Acuminate.

Sides.—Equal.

Surface.—Irregularly furrowed toward apex, ridges usually rounded, pitted toward base.

Tendency to split.—None.

Color.—Brown to reddish brown (18-1540) to (19-1540).

Use: The fruit of the present new variety is well suited for novelty, processing and canning, as well as for use as a dessert peach.

Market.—Local and long distance.

Keeping quality: Very good.

Shipping quality: Very good.

The new and distinct variety of peach tree, its foliage and fruit described above may vary in slight detail due to variations in climate, soil conditions and cultural practices under which the variety may be grown. The botanical

description above is that of the variety grown under the ecological conditions prevailing near Seomyun, Yunkikun, Chungnam, Korea.

We claim:

1. A new and distinct variety of peach tree, 'Star Light', substantially as illustrated and described, characterized in that the tree is large, vigorous, half open growth and is a regular and productive bearer of large, late season maturing, white flesh, freestone fruit with excellent flavor and eating quality; the fruit is further characterized in that the fruit has firm flesh, good handling and shipping quality, and it has a skin with pink overspread with light yellow.

* * * * *

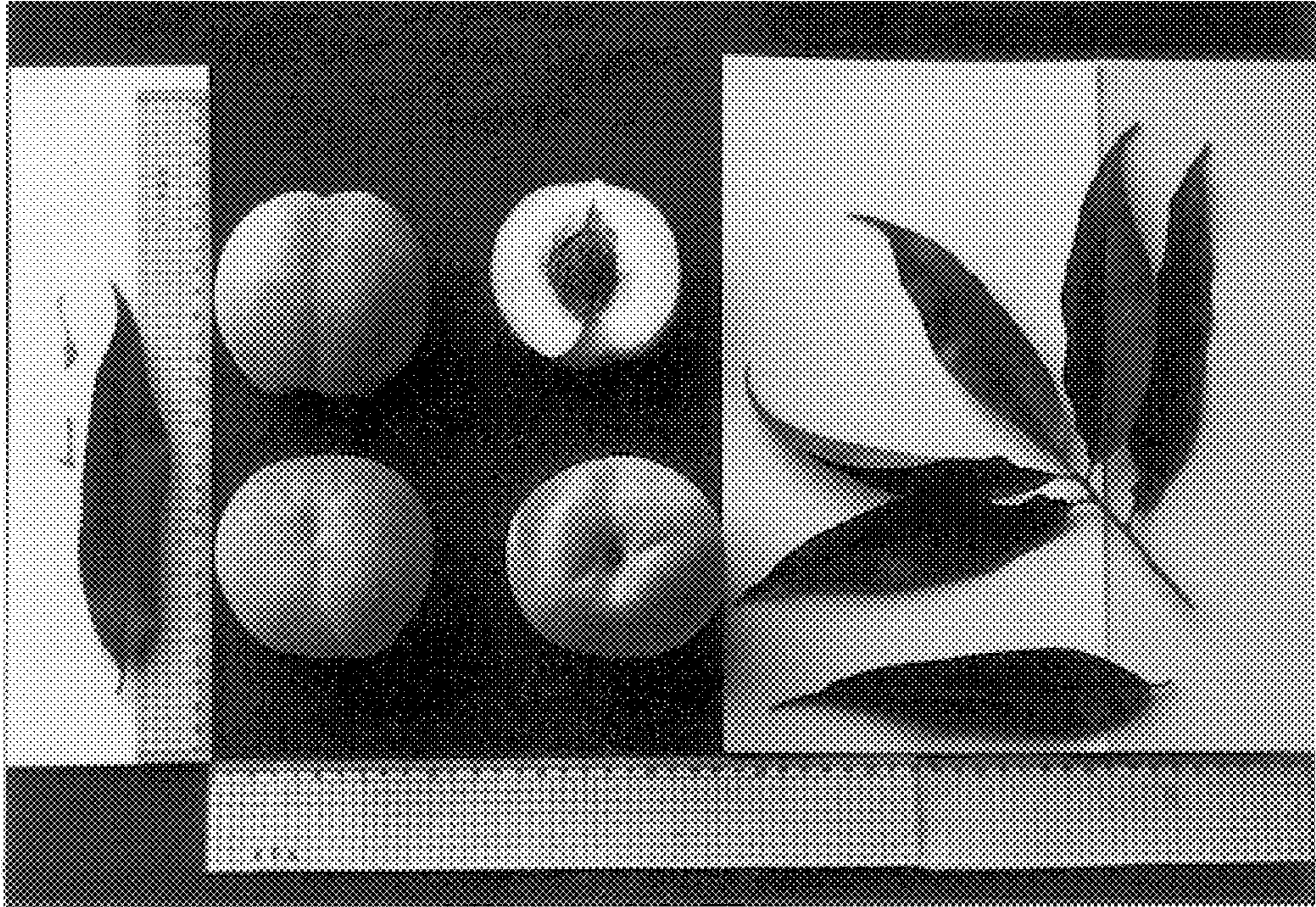


Fig. 1



Fig. 2

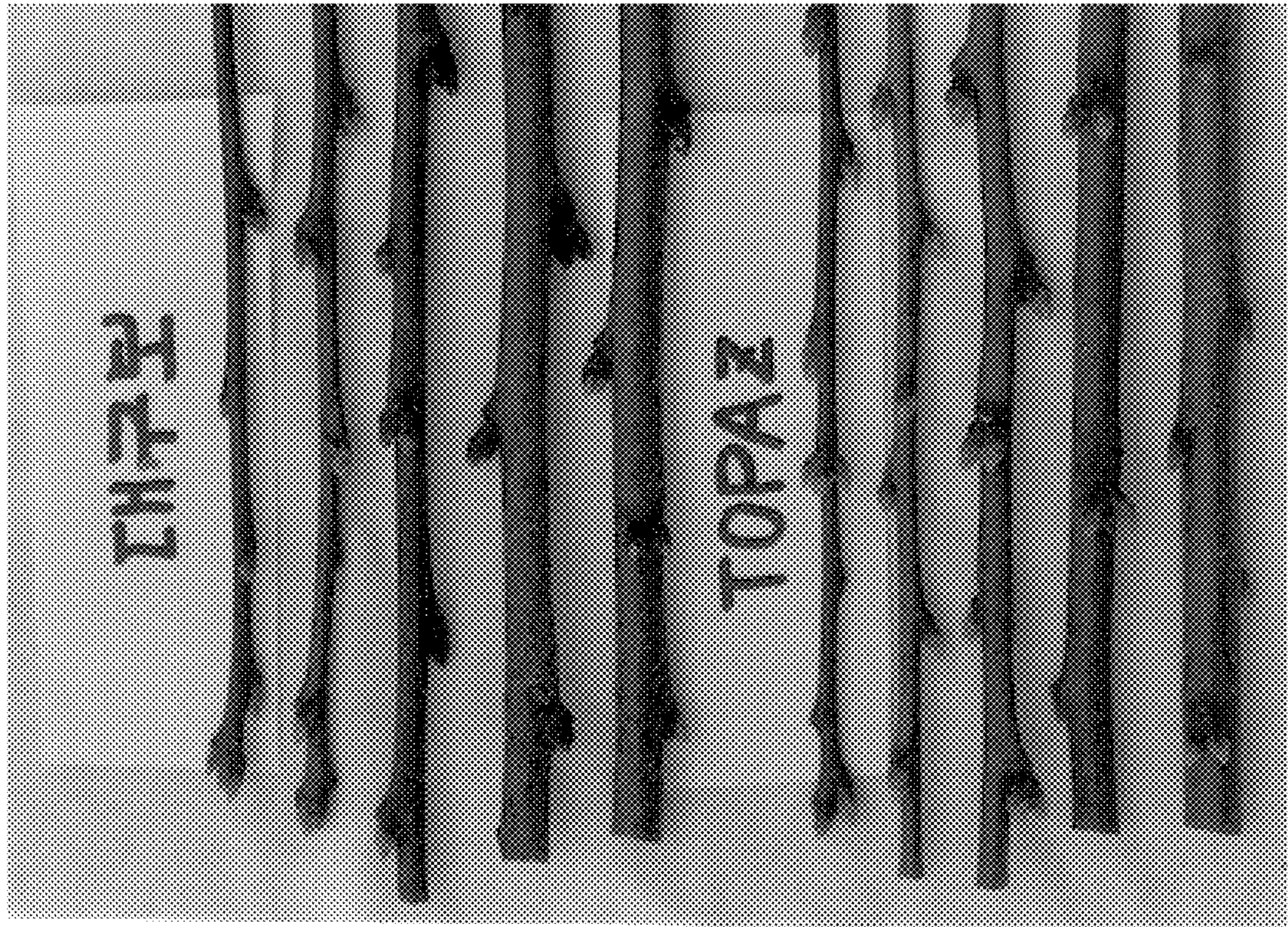


Fig. 3



Fig. 4