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(12) **United States Plant Patent**
Stemkens(10) **Patent No.:** US PP22,438 P2
(45) **Date of Patent:** Jan. 3, 2012(54) **VERBENA PLANT NAMED 'FLAGDENA'**(50) Latin Name: *Verbena×hybrida*
Varietal Denomination: Flagdena(75) Inventor: **Henricus Godefridus Wilhelmus Stemkens**, Enkhuizen (NL)(73) Assignee: **Syngenta Crop Protection AG**, Basel (CH)

(*) 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.: **12/806,706**(22) Filed: **Aug. 19, 2010**(51) **Int. Cl.***A01H 5/00* (2006.01)(52) **U.S. Cl.** **Plt./308**(58) **Field of Classification Search** Plt./308
See application file for complete search history.*Primary Examiner* — Annette Para(74) *Attorney, Agent, or Firm* — S. Matthew Edwards(57) **ABSTRACT**

A new *Verbena* plant named 'Flagdena' particularly distinguished by the large tri-colored, white and 2 distinct tones of red-purple flowers, medium green foliage, medium sized creeping and trailing plant habit with good branching and is early to flower.

2 Drawing Sheets**1**

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

Varietal denomination: 'Flagdena'.

BACKGROUND OF THE NEW PLANT

The present invention comprises a new *Verbena*, botanically known as *Verbena×hybrida*, and hereinafter referred to by the variety name 'Flagdena'.

'Flagdena' is a product of a planned breeding program. The new cultivar has large tri-colored, white and 2 distinct tones of red-purple flowers, medium green foliage, medium sized creeping and trailing plant habit with good branching and is early to flower.

'Flagdena' originated from an open pollinated hybridization made in the summer of 2004 in a controlled breeding environment in Enkhuizen, Netherlands. The female parent was the unpatented proprietary plant designated 'G0549-1' with white flowers. 'G0549-1' less seed set and has fewer flowers than 'Flagdena'.

The male parent of 'Flagdena' was an unknown *Verbena* plant in the greenhouse with the female plant. The resultant seed was sown in February 2005.

'Flagdena' was selected as one flowering plant within the progeny of the stated cross in the August 2005 in a controlled environment in Enkhuizen, Netherlands.

The first act of asexual reproduction of 'Flagdena' was accomplished when vegetative cuttings were propagated from the initial selection in August 2005 in a controlled environment in Enkhuizen, Netherlands.

BRIEF SUMMARY OF INVENTION

Horticultural examination of plants grown from cuttings of the plant initiated in August 2005, and continuing thereafter, has demonstrated that the combination of characteristics as herein disclosed for 'Flagdena' are firmly fixed and are retained through successive generations of asexual reproduction.

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'Flagdena' has not been observed under all possible environmental conditions. The phenotype may vary significantly with variations in environment such as temperature, light intensity and day length.

Plant Breeder's Rights for this cultivar were applied for in Canada on Feb. 9, 2010 (#10-6831) and in the European Union on Sep. 29, 2009 (#2009/1907). 'Flagdena' has not been made publicly available more than one year prior to the filing of this application.

The following traits have been repeatedly observed and are determined to be basic characteristics of the new variety. The combination of these characteristics distinguishes this *Verbena* as a new and distinct variety.

BRIEF DESCRIPTION OF THE PHOTOGRAPHS

The accompanying photographic drawings show typical flower and foliage characteristics of 'Flagdena' with colors being as true as possible with an illustration of this type. The photographic drawings show in

FIG. 1, a whole flowering plant, in

FIG. 2, a complete umbel, and in

FIG. 3, a close-up of the flowers.

DETAILED BOTANICAL DESCRIPTION

The aforementioned photographs were taken in April 2010 from plants growing in a greenhouse trial in Gilroy, Calif. USA. These plants were growing in 4 inch pots and were approximately 15-16 weeks of age.

The plant descriptions and measurements were taken in late May 2010 in Hillscheid, Germany on about 12 week old plants that had been planted into 12 cm pots and were grown on benches in a greenhouse at a minimum temperature (heating temperature) of 12° C. From April on, a minimum night temperature of 8° C. was held, while day temperatures were much higher, depending on outdoor temperature.

Color references are made to The Royal Horticultural Society Colour Chart (R.H.S.) 2001.

TABLE 1

DIFFERENCES BETWEEN THE NEW VARIETY 'FLAGDENA' AND A SIMILAR VARIETY	
'Flagdena'	'Pink Parfait' (unpatented)
Flower color:	White and red-purple
Flowering response:	Earlier to flower
Foliage size:	Smaller
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Plant:	
<i>Form, growth and habit.</i> —Herbaceous, initially spreading, later becoming decumbent to trailing.	
<i>Plant height.</i> —About 8.0 cm.	
<i>Plant height (inflorescence included).</i> —Up to 16.0 cm.	15
<i>Plant width.</i> —About 41.0 cm.	
Roots:	
<i>Number of days to initiate and produce roots.</i> —About 10-14 days at about 22 degrees C.	
<i>Type.</i> —Fine, fibrous, free branching.	20
<i>Color.</i> —RHS N155B.	
Foliage:	
<i>Arrangement.</i> —Single and opposite, decussate on upright directed stems.	
<i>Immature, leaf color, upper surface.</i> —RHS 137C.	25
<i>Lower surface.</i> —Between RHS 138A and RHS 138B.	
<i>Mature, leaf color, upper surface.</i> —RHS 137A.	
<i>Lower surface.</i> —RHS 138A to RHS 138B but a little more yellowish.	
<i>Length.</i> —5.5-6.5 cm.	30
<i>Width.</i> —2.8-3.9 cm.	
<i>Shape.</i> —Deltoid, not dissected.	
<i>Base shape.</i> —Acute to attenuate.	
<i>Apex shape.</i> —Acute to obtuse.	
<i>Margin.</i> —Distinctly crenate or dentate, with incisions of about 0.4-0.6 cm.	35
<i>Texture, upper surface.</i> —Slightly glossy, with sparse, short hair.	
<i>Lower surface.</i> —Short, stiff hair mainly along the veins; some glandular hairs.	40
<i>Color of veins, upper surface.</i> —RHS 144A becoming indistinct.	
<i>Color of veins, lower surface.</i> —RHS 145B.	
<i>Petiole color.</i> —RHS 145B; with RHS 145C on the under side.	45
<i>Length.</i> —0.1-0.4 cm.	
<i>Diameter.</i> —0.1-0.3 cm.	
<i>Texture.</i> —Hirtellous.	
Stem:	
<i>Characteristics.</i> —Side branches develop potentially at very node.	50
<i>Color of stem.</i> —RHS 137C.	
<i>Length of stem.</i> —Approximately 18-26 cm.	
<i>Diameter.</i> —0.4 cm.	
<i>Length of internodes.</i> —Approximately 4-6 cm.	55
<i>Texture.</i> —Rough; densely covered with hair; hirsute.	
<i>Color of peduncle.</i> —RHS 138A.	
<i>Length of peduncle.</i> —Most often 4.5-6.5 cm.	
<i>Peduncle diameter.</i> —2-2.5 cm.	
<i>Texture.</i> —Rough, densely covered with short glandular hair; hirtellous.	60
Inflorescence:	
<i>Type.</i> —Umbel-like, but actually a spike, umbrella-shaped to roughly semi-spherical.	
<i>Blooming habit.</i> —Flowers continuously.	65
<i>Quantity of inflorescences per plant.</i> —10-15.	
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<i>Lastingness of individual blooms on the plant.</i> —About 6 days in the greenhouse.	
<i>Fragrance.</i> —None.	
<i>Inflorescence horizontal diameter.</i> —5.3-5.8 cm.	
<i>Inflorescence depth (height).</i> —2.5-3.5 cm.	
<i>Quantity of flowers and buds per inflorescence.</i> —10-15.	
Bud (just when starting to show color):	
<i>Color.</i> —Mostly RHS N155B or some slightly RHS 56C.	
<i>Length.</i> —2.1-2.4 cm.	
<i>Width.</i> —Up to 0.7 cm.	
<i>Shape.</i> —Mainly tube-shaped, future corolla small and round at the upper end.	
Floret:	
<i>Form and type.</i> —Sessile; salverform, composed of 5 partly fused petals with a base of a narrow tube.	10
<i>Immature color, upper surface.</i> —2 upper petals are RHS N57A with a white patch basally; 3 lower petals are RHS 155D with a flush of RHS N57B at the margins fading slightly inward to RHS 65A.	
<i>Lower surface.</i> —RHS 155A with RHS 62B to RHS 62D around the margins.	
<i>Mature color, upper surface.</i> —2 upper petals are RHS N57B with a white patch basally, maturing to a mottling of between RHS N57B and RHS N57C with a white patch basally; 3 petals are white with a heavier mottled flush of between RHS 65A and RHS 65B covering about 1/2 of each petal.	
<i>Lower surface.</i> —RHS 155A with RHS 62C to RHS 62D around the margins.	
<i>Floret diameter.</i> —2.1-2.3 cm.	
<i>Floret depth.</i> —2.0-2.2 cm.	
<i>Length of petals.</i> —0.6-0.9 cm.	
<i>Width of petals.</i> —0.7-0.9 cm.	
<i>Petal shape.</i> —Obcordate.	
<i>Apex shape.</i> —Emarginate.	
<i>Margin.</i> —Entire.	
<i>Petal texture, upper surface.</i> —Smooth and glabrous.	
<i>Lower surface.</i> —Smooth and glabrous.	
<i>Corolla tube length.</i> —1.8-2.1 cm.	
<i>Corolla tube color inside.</i> —RHS 150D.	
<i>Tube color outside.</i> —RHS 150D or sometimes RHS 157D.	
<i>Corolla texture, inside.</i> —Glabrous.	
<i>Outside.</i> —Glabrous basally; glandular hairs at the flare.	
Calyx:	
<i>Type.</i> —Five sepals whose margins are fused to each other along their length, with a transparent membrane of less than 0.1 cm in width and with one smaller sepal attached to the base of the calyx.	
<i>Color of sepals.</i> —RHS 143B to RHS 143C.	
<i>Length of sepals.</i> —1.1-1.3 cm.	
<i>Width of sepals.</i> —0.2-0.3 cm.	
<i>Sepal shape.</i> —Linear.	
<i>Apex shape.</i> —Acute.	
<i>Margins.</i> —Entire.	
<i>Texture.</i> —Densely covered with short hair.	
Reproductive organs:	
<i>Pistil.</i> —1.	
<i>Length.</i> —1.5-2.0 cm.	
<i>Style color.</i> —RHS 144C.	
<i>Style length.</i> —1.3-1.8 cm.	
<i>Stigma color.</i> —RHS 143B.	
<i>Stamens.</i> —Anthers and filaments fused to upper half of corolla tube; four anthers with two pollen sacs per anther.	

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Color of filaments.—RHS 150D to RHD 155B.

Length filaments.—0.1 cm.

Anther color.—RHS N144B.

Length of anthers.—0.1-0.15 cm.

Color of pollen.—RHS 1B.

Pollen amount.—Moderate.

Fertility/seed set.—Has not been observed on this hybrid.

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Disease/pest resistance: Disease/pest resistance has not been observed on this hybrid.

What is claimed is:

1. A new and distinct variety of *Verbena* plant named⁵ ‘Flagdena’ substantially as illustrated and described herein.

* * * *



FIGURE 1.

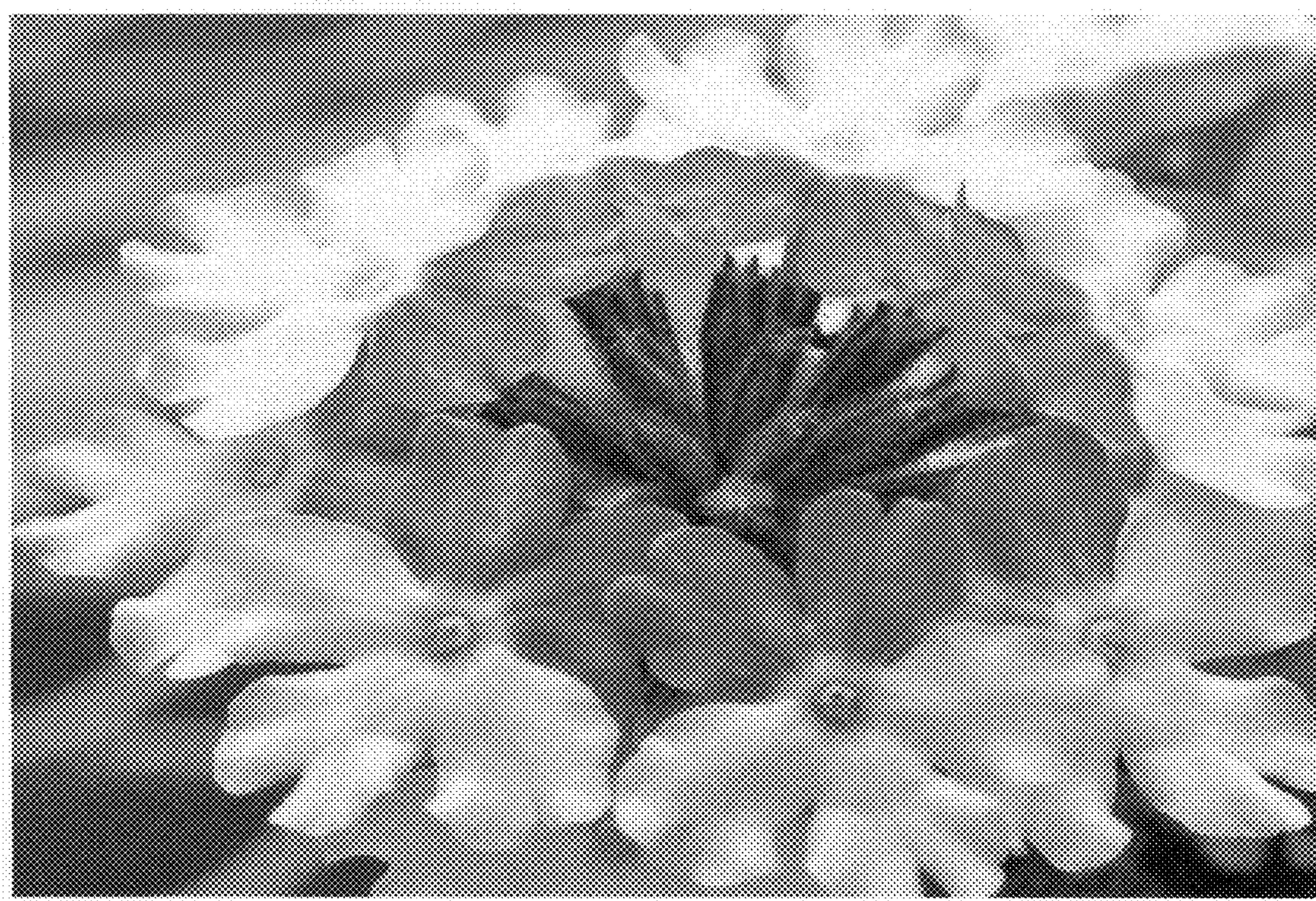


FIGURE 2.

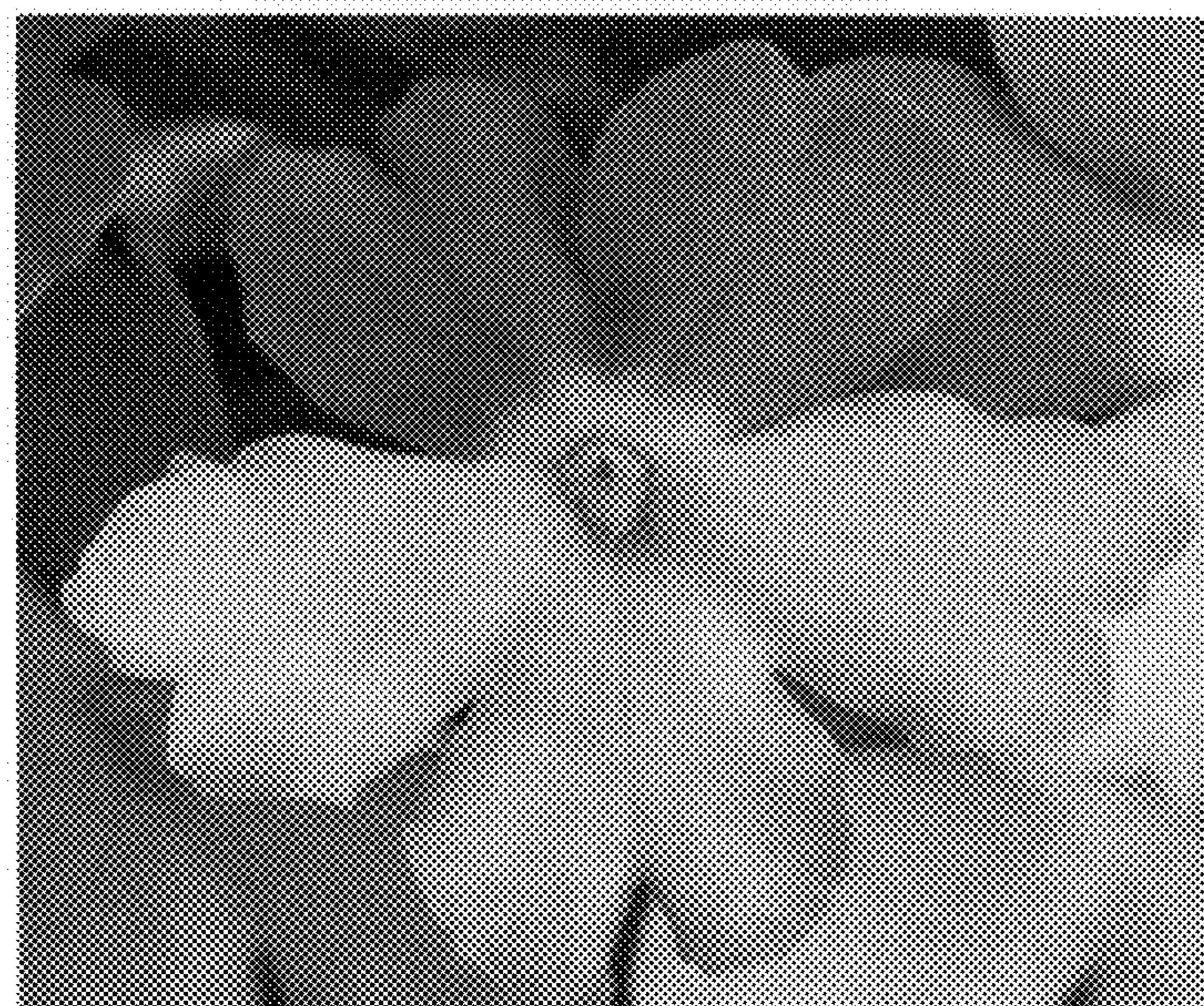


FIGURE 3.