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15/330,615	10/19/2016	Paul L. Cote	2166-66A	8142
45971	7590	12/18/2019	EXAMINER	
ERIC FINCHAM 871 Shefford Street Suite 304 Bromont, QUEBEC J2L 1C4 CANADA			IJAZ, MUHAMMAD	
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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte PAUL L. COTE

Appeal 2019-004718
Application 15/330,615
Technology Center 3600

Before MURRIEL E. CRAWFORD, MICHAEL C. ASTORINO, and
JAMES A. WORTH, *Administrative Patent Judges*.

ASTORINO, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE

Pursuant to 35 U.S.C. § 134(a), Appellant¹ appeals from the
Examiner's decision to reject claims 1–8 and 10. We have jurisdiction under
35 U.S.C. § 6(b).

We REVERSE.

¹ We use the word “Appellant” to refer to “applicant” as defined in
37 C.F.R. § 1.42. The Appellant identifies the real party in interest as
Paul L. Cote. Appeal Br. 2.

CLAIMED SUBJECT MATTER

Claim 1, the sole independent claim, is representative of the subject matter on appeal and reproduced below.

1. A pole designed to be inserted into the ground, said pole having a lower tapered segment at one end thereof, said lower tapered segment having double helical threads thereon, and an upper segment.

REFERENCES

The prior art relied upon by the Examiner is:

Name	Reference	Date
Daline	US 3,293,809	Dec. 27, 1966
Su et al. (“Su”)	US 8,740,531 B2	June 3, 2014
Parent	US 2012/0104190 A1	May 3, 2012
Sangwai et al. (“Sangwai”)	US 2016/0054213 A1	Feb. 25, 2016

REJECTIONS

Claims 1 and 2 are rejected under 35 U.S.C. § 102(a)(1)/102(a)(2) as being anticipated by Daline.

Claims 4–8 are rejected under 35 U.S.C. § 103 as being unpatentable over Daline.

Claims 1–5, 8, and 10 are rejected under 35 U.S.C. § 103 as being unpatentable over Parent and Su.

Claims 6 and 7 are rejected under 35 U.S.C. § 103 as being unpatentable over Parent, Su, and Sangwai.

ANALYSIS

Anticipation and Obviousness based on Daline

Independent claim 1 requires a pole including a “lower tapered segment having double helical threads.”

The record suggests that the Appellant and the Examiner disagree as to the meaning of the term “double helical threads” as recited in claim 1. *See* Final Act. 2–3, Appeal Br. 8–9; Ans. 3–4. The Examiner determines that the term “double helical threads” consists of two equal, identical, or similar helical threads. Ans. 3; *see* Final Act. 2. The Appellant asserts that the term “double-start” “means that there are two ridges wrapped around a cylinder of the screw’s body.” Appeal Br. 8 (citing App’x B 5 (Wikipedia.org, “Screw thread,” https://en.wikipedia.org/wiki/Screw_thread (last visited Nov. 19, 2018))). The Appellant asserts that the term “double threads” has the same meaning. *Id.* The Appellant implies that the term “double helical threads” must also fit this definition. *See id.*

We determine that the term “double helical threads,” when read by one of ordinary skill in the art upon reading the Specification, refers to: a pair of parallel threads intertwined about a common axis; or two spiral threads in the surface of a cylinder that coil around its axis. *See double helix def.*, LEXICO DICTIONARY, https://www.lexico.com/en/definition/double_helix (last visited Dec. 10, 2019) (“A pair of parallel helices intertwined about a common axis”); *double helix def.*, MERRIAM-WEBSTER ON-LINE DICTIONARY, <https://www.merriam-webster.com/dictionary/double%20helix> (last visited Dec. 10, 2019) (“a helix or spiral consisting of two strands in the surface of a cylinder that coil around its axis”). The foregoing interpretation is consistent with the Specification. *See, e.g.*, Spec. 5 (“Lower tapered

portion 14 is provided with a first helical thread 18 which extends outwardly from the body. A second helical thread 20 is provided intermediate first helical thread 18 and also extends outwardly from the body.”), Figs. 1, 5, 6.

The Examiner’s rejection relies on a finding that the lower portion of Daline’s post, including external threads 4a, 5a, corresponds to the claimed “lower tapered segment having double helical threads.” Final Act. 7.

However, external threads 4a and 5a are not disclosed or shown as: a pair of parallel threads intertwined about a common axis; or two spiral threads in the surface of a cylinder that coil around its axis. As to the latter, external threads 4a, 5a exist on separate structures, namely, that of post body 4 and stake 5, respectively. *See Daline*, Fig. 2; *see also id.* at col. 2, ll. 41–43. In the Appellant’s words, Daline’s “threads are completely separate” as “there is a portion of the pole having a first thread thereon and a second portion of the pole having a further thread thereon.” Appeal Br. 8.

Thus, we do not sustain the Examiner’s rejection of claims 1 and 2 as being anticipated by Daline. The Examiner’s rejection of claims 4–8 as being unpatentable over Daline is based on the same errant finding as discussed above. The rejection is not cured by the additional findings and/or reasoning associated therewith. Therefore, we do not sustain the Examiner’s rejection of claims 4–8.

Obviousness based on Parent and Su, and Parent, Su, and Sangwai

The Examiner’s rejections based on Parent and Su, and Parent, Su, and Sangwai, rely on the Examiner’s determination that it would have been obvious to one of ordinary skill in the art to modify the thread of Parent’s support pole to be a double helical thread, as taught by Su, because Su

describes that its screw threads accelerate the expelling speed for the cutting debris and decrease the resistance. Final Act. 10 (citing Su, col. 4, ll. 11–15).

The Appellant points out that the advantage of Su’s screw — to accelerate the expelling speed for cutting debris and decrease the resistance — applies “when the screw is used with a material such as wood and the like wherein the material is actually cut and the cut material is expelled.” Appeal Br. 9–10. The Appellant argues that the same benefit does not apply to earth (i.e., ground) and therefore, does not apply to the Appellant’s invention. *Id.* at 10. The Appellant’s argument persuades us that the Examiner’s rejection is inadequately supported.

As the Appellant points out, the Examiner’s reasoning is particular to the advantages of Su’s screw being fastened into wood. *See* Su col. 1, ll. 20–27, col. 3, l. 16 (“plywood”). However, the Examiner fails to adequately explain on the record how Su’s advantages, which are particular to a screw being drilled into plywood, would benefit Parent’s support pole, which is designed to be inserted into the ground. *See* Parent, Abstract. Therefore, we determine that the Examiner’s rejection lacks the requisite underpinning to be adequately supported.

Thus, we do not sustain the Examiner’s rejection of claims 1–5, 8, and 10 as being unpatentable over Parent and Su. The Examiner’s rejection of claims 6 and 7 as being unpatentable over Parent, Su, and Sangwai is based on the same inadequately supported reasoning as discussed above. The rejection is not cured by the additional findings and/or reasoning associated therewith. Therefore, we do not sustain the Examiner’s rejection of claims 4–8.

CONCLUSION

In summary:

Claims Rejected	35 U.S.C. §	Reference(s)/Basis	Affirmed	Reversed
1, 2	102(a)(1)/102(a)(2)	Daline		1, 2
4-8	103	Daline		4-8
1-5, 8, 10	103	Parent, Su		1-5, 8, 10
6, 7	103	Parent, Su, Sangwai		6, 7
Overall Outcome				1-8, 10

REVERSED

Notice of References Cited	Application/Control No.	Applicant(s)/Patent Under Patent Appeal No.	
	Examiner	Art Unit	Page 1 of 1

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US DICTIONARY

double helix



THE DAY

notorious



ADJECTIVE

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Definition of double helix in English:

double helix



Pronunciation /'dɛbəl 'hɛlɪks/ /'dɛbəl 'hɪlɪks/

NOUN

A pair of parallel helices intertwined about a common axis, especially that in the structure of the DNA molecule.

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Pronunciation

double helix /'dɛbəl 'hɛlɪks/ /'dɛbəl 'hɪlɪks/



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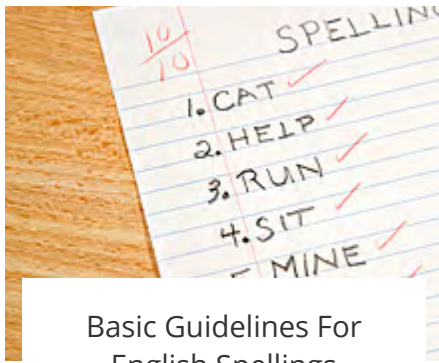
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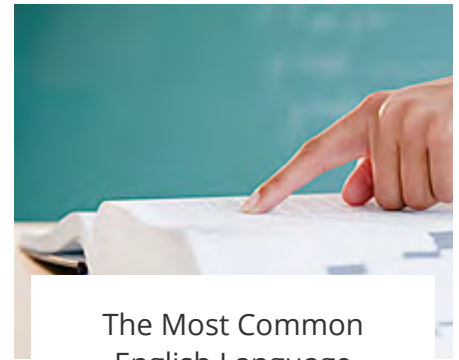
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Definition of *double helix*

: a helix or spiral consisting of two strands in the surface of a cylinder that coil around its axis especially : the structural arrangement of DNA in space that consists of paired polynucleotide strands stabilized by cross-links between purine and pyrimidine bases — compare [alpha-helix](#), [watson-crick model](#)

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English Language Learners Definition of *double helix*

technical : the shape formed by two parallel lines that twist around each other

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double helix

[noun](#)

Medical Definition of *double helix*

: a helix or spiral consisting of two strands in the surface of a cylinder that coil around its axis especially : the structural arrangement of DNA in space that consists of paired polynucleotide strands stabilized by cross-links between purine and pyrimidine bases — compare [alpha-helix](#), [watson-crick model](#)

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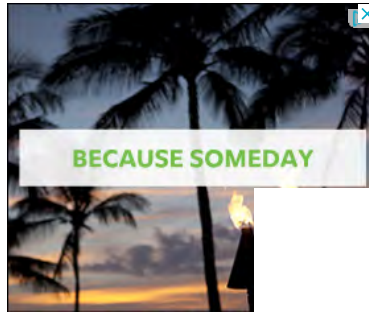
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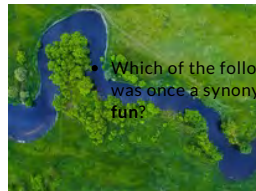
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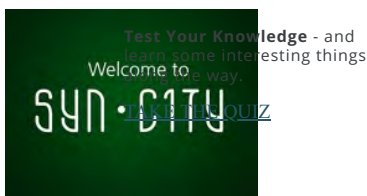


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