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BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

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*Ex parte* ANTONIO GUTIERREZ, JACOB EMERT,
ANDREW J. D. RITCHIE, and MICHAEL MINOTTI

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Appeal 2009-009811
Application 10/727,941
Technology Center 3700

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Before HUBERT C. LORIN, MICHAEL C. ASTORINO, and
DEBORAH KATZ, *Administrative Patent Judges*.

KATZ, *Administrative Patent Judge*.

DECISION ON APPEAL

This appeal of the rejection of claims 1-22 was brought under 35 U.S.C. § 134 by the named inventors and the real party-in-interest, Infineum International Limited. (App. Br. 1-2). A hearing was held on January 10, 2012. We have jurisdiction under 35 U.S.C. § 6(b). We affirm.

In the Answer entered March 13, 2009, to which we refer in this opinion, the Examiner maintained the following rejections:

- Claims 1, 2, 5, 6-10, 13-15, and 19-22 under the non-statutory doctrine of obviousness-type double-patenting over claims 1-5, 10, 11, and 16-21 of Ritchie[1] (Ans. 3-4);
- Claims 1-4, 6-12, 14-16, 19, and 21 under 35 U.S.C. § 103(a) over Carrick[2] and Nalesnik[3] (Ans. 5-6);
- Claims 5 and 13 under 35 U.S.C. § 103(a) over Carrick, Nalesnik, and Locke[4] (Ans. 6-7);
- Claim 17 under 35 U.S.C. § 103(a) over Carrick, Nalesnik, and Mishra[5] (Ans. 7-8);
- Claim 18 under 35 U.S.C. § 103(a) over Carrick, Nalesnik, Mishra, and Ver Strate[6] (Ans. 8-9); and
- Claims 20 and 22 under 35 U.S.C. § 103(a) over Carrick, Nalesnik, and Ueda[7] (Ans. 9-10).

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[1] U.S. Patent No. 6,869,919, issued March 22, 2005.
[2] U.S. Patent No. 6,583,092, issued June 24, 2003.
[3] U.S. Patent No. 5,207,938, issued May 4, 1993.
[4] U.S. Patent No. 6,784,143, issued August 31, 2004.
[5] U.S. Patent No. 6,753,381, issued June 22, 2004.
[6] U.S. Patent No. 4,804,794, issued February 14, 1989.
[7] U.S. Patent No. 4,286,567, issued September 1, 1981.

The Examiner withdrew the rejections under 35 U.S.C. § 112, second paragraph, of claims 4 and 12, following Appellants' amendments to claims 4 and 12 on November 7, 2007. (Ans. 2 and 10.)

The Examiner also withdrew the rejections of claims 1, 2, 5, 6-10, 13-15, and 19-22 under 35 U.S.C. § 102(e) over Ritchie in light of Appellants' arguments. (*See* Ans. 10.)

Appellants do not argue for the separate patentability of any of the claims in the groups of rejections. In addition, Appellants rely on their arguments against the rejection of claim 1 over Carrick and Nalesnik to argue against the rejections of claims 5, 13, 17, 18, 20, and 22. (App. Br. 9.) We focus on the rejection of claim 1 over Ritchie and over Carrick and Nalesnik. *See* 37 C.F.R. § 41.37(c)(1)(vii).

Appellants' claim 1 recites[8]:

> A lubricating oil composition comprising
> [a] a major amount of at least one of a Group I, Group II or Group III mineral oil of lubricating viscosity, or a mixture thereof;
> [b] a minor amount of one or more high molecular weight polymers comprising olefin copolymers containing at least one moiety selected from alkyl amine, alkyl amide, aryl amine or aryl amide groups, nitrogen-containing heterocyclic groups or ester linkages; and
> [c] a minor amount of dispersant comprising one or more nitrogen-containing dispersants that are the reaction product of
> (i) a polyalkenyl-substituted mono- or dicarboxylic acid, a polyalkenyl-substituted anhydride or a polyalkenyl-substituted ester; and

[8] Claim 1 has been modified by the addition of indentations and bracketed letters. *See* 37 C.F.R. § 1.75 (i).

> (ii) a polyamine;
>
> [d] wherein at least one of the nitrogen-containing dispersants has a polyalkenyl moiety with a number average molecular weight of at least about 1800, and from about 1.3 to 1.7 mono- or dicarboxylic acid producing moieties per polyalkenyl moiety; and
>
> [e] dispersant contributes at least about 0.08 wt. % of nitrogen to the lubricating oil composition.

(App. Br., Claims App'x, 1.)

Obviousness-type double-patenting

To argue against the Examiner's rejections under the doctrine of obviousness-type double-patenting, Appellants refer to their arguments against the rejections over Ritchie under 35 U.S.C. § 102(e). (App. Br. 7.) Appellants argue that Ritchie does not *anticipate* the claimed lubricating oil and related methods because the "functionality" of the dispersant claimed by Ritchie is not specified or critical and because the combination of dispersants claimed by Appellants is not shown in Ritchie to improve performance. (*Id.*) Appellants also argue that the dispersants in Ritchie are not required to have the molecular weight distribution range claimed by Appellants and are not described in Ritchie with sufficient detail to determine if they fall within the scope of Appellants' claims. (*Id.*)

Appellants do not argue that the Examiner's findings of fact regarding the lubricating oil compositions claimed by Ritchie are in error. Nor do Appellants argue that the Examiner's conclusions about the parameters that would have been considered obvious were made in error. (*See* Ans. 3-4 and 10-11). Thus, Appellants do not argue that the Examiner erred in concluding the claimed lubricating oil and related methods would have been

*obvious*. Accordingly, we affirm the Examiner's decision to reject the claims under the doctrine of obviousness-type double-patenting.

Obviousness over Carrick and Nalesnik

The following findings of fact are supported by at least a preponderance of the evidence.

Carrick teaches a lubricating oil for diesel engines comprising Groups I, II, or III mineral oil as a base. (Carrick, col. 4, ll. 25-40.)

Carrick teaches a lubricating oil that includes a dispersant of a succinic acid or anhydride substituted with a hydrocarbon and reacted with polyamine. (*Id.*, col. 15, ll. 1-32.) Carrick teaches further that the succinic acid or anhydride is a dicarboxylic acid. (*Id.*, col. 16, ll. 42-58.) Carrick teaches that the hydrocarbon substituent group is a polyalkene with a number average MW form 700-2000 (Carrick, col. 16, ll. 52-59) and that the ratio of succinic groups to polyalkene substituent groups is 0.9 to 2.5 (*id.*, col. 16, ll. 47-52). Carrick teaches the nitrogen-containing dispersant is present at up to about 10% by weight. (*Id.*, col. 20, ll. 55-61.) Appellants do not dispute that this amount of nitrogen-containing dispersant indicates that the oil contains at least about 0.08% by weight of nitrogen.

Carrick also teaches adding viscosity index improvers to lubricating oil. (Carrick, col. 22, ll. 50-52.) Carrick teaches the viscosity index improver can be an olefin copolymer grafted with maleic anhydride and derivatized with an amine. (Carrick, col. 23, ll. 15-26.) Carrick does not teach a specific amine.

Nalesnik teaches viscosity index improvers that are used in producing dispersant-antioxidant olefin copolymers. Nalesnik teaches derivatizing

olefin copolymer (maleic anhydride olefin copolymer ("MAOCP")) with an amine, specifically N-phenyl phenylenedamine, which the Examiner found is an aryl amide. (Nalesnik, col. 5, ll. 1-25, Example 1; Ans. 6.)

Examiner concluded that it would have been obvious to add the viscosity index improver of Nalesnik to the lubricating oil of Carrick because Carrick teaches using an olefin copolymer derivatized with amine as a viscosity index improver and Nalesnik teaches that N-phenyl phenylenedamine is a desirable, known aryl amine for making a derivatized olefin copolymer. (Ans. 6.)

Appellants argue that Carrick does not require dispersants in the disclosed lubricating oil, and if present, does not require the recited polyalkenyl molecular weight and/or molecular weight distribution or the claimed nitrogen content of the dispersant. (App. Br. 8.) Appellants argue that the composition of Carrick does not have the "required dispersant functionality." (*Id.*) Appellants also argue that Carrick does not require viscosity modifiers in the disclosed lubricating oil and, if present, does not require that a viscosity modifier be derivatized by a nitrogen-containing moiety. (*Id.*)

Appellants do not dispute that these elements are taught, even if not required, in Carrick.[9] To render the claimed lubricating oil obvious, the

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[9] Appellants state that the Examiner's assumption that "the dicarboxylic acid groups are viewed as a two separate moieties in the ratio of carboxylic acid producing moieties," is "unreasonable." (App. Br. 7.) Appellants do not provide a citation to the record, though they quote this as the Examiner's language. Appellants do not provide sufficiently specific argument and do not direct us to sufficient evidence in support of their contention. Furthermore, Appellants state that the Examiner's interpretation "is not

prior art need not *require* the recited elements, as long as they are *suggested*. *See In re Lamberti*, 545 F.2d 747, 750 (C.C.P.A. 1976) ("The fact that neither of the references expressly discloses asymmetric dialkyl moieties is not controlling; the question under 35 U.S.C. s 103 is not merely what the references expressly teach, but what they would have suggested to one of ordinary skill in the art at the time the invention was made. . . . the fact that a specific symmetric dialkyl is taught to be preferred is not controlling, since all disclosures of the prior art, including unpreferred embodiments, must be considered." (citations omitted)). Accordingly, we are not persuaded by Appellants' arguments.

Appellants argue that Nalesnik fails to teach any advantage in lubricating oil when the disclosed high molecular weight polymers derivatized with nitrogen-containing moieties are used in combination with the class of dispersants recited. (App. Br. 8.) "[W]hen a patent claims a structure already known in the prior art that is altered by the mere substitution of one element for another known in the field, the combination must do more than yield a predictable result." *KSR Int'l Co. v. Teleflex, Inc.*, 550 U.S. 398, 416 (2007). Carrick teaches derivatizing olefin copolymer with an amine in lubricating oil. (Carrick, col. 23, ll. 15-26.) Because Nalesnik teaches that the amine was known to be an aryl amine, as claimed (Nalesnik, col. 5, ll. 1-25, Example 1; Ans. 6), Appellants' argument has failed to persuade us that the claimed lubrication oil was non-obvious.

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critical with regard to the present rejection." (App. Br. 8.) Accordingly, we do not consider this statement as an argument.

Appellants argue that claimed combination of dispersant and derivatized high molecular weight polymer produces unexpected results, citing to the results of the "Mack T-11" test provided in Tables 1-3, of their specification. (App. Br. 8, citing to spec., pp. 35-38.) Table 1 includes test results for three comparative samples and an inventive sample. Appellants do not provide sufficient explanation of how the comparative examples relate to the compositions of mineral oil, olefin copolymer, and dispersant disclosed in Carrick. Appellants do not point to, and we do not find, sufficient explanation that the comparative examples described in their specification represent the prior art closest to the claimed composition. (*See* Ans. 12.) Even if Appellants' specification contains objective evidence of an advantage in the claimed composition, Appellants must compare the claimed composition to the closest prior art to successfully demonstrate unexpected results. *See In re DeBlauwe*, 736 F.2d 699, 705 (Fed. Cir. 1984) ("[A]ppellants have not presented any experimental data showing that prior heat shrinkable articles split. Due to the absence of tests comparing appellants' heat shrinkable articles with those of the closest prior art, we conclude that appellants' assertions of unexpected results constitute mere argument and conclusory statements in the specification which cannot establish patentability.")

Dependent Claims 5, 13, 17, 18, 20, and 22

Appellants argue that the claims dependent on claims 1 and 8 are patentable for the same reasons they argue that claim 1, and by extension claim 8, is patentable. (App. Br. 9.) For the reasons provided above, we are not persuaded by these arguments. Accordingly, we are not persuaded that

the lubricating oil recited in Appellants' dependent claims are patentable under 35 U.S.C. § 103(a).

**ORDER**

Upon consideration of the record and for the reasons given,

the rejection of claims 1, 2, 5, 6-10, 13-15, and 19-22 under the non-statutory doctrine of obviousness-type double-patenting over claims 1-5, 10, 11, and 16-21 of Ritchie is sustained;

the rejection of claims 1-4, 6-12, 14-16, 19, and 21 under 35 U.S.C. § 103(a) over Carrick and Nalesnik is sustained;

the rejection of claims 5 and 13 under 35 U.S.C. § 103(a) over Carrick, Nalesnik, and Locke is sustained;

the rejection of claim 17 under 35 U.S.C. § 103(a) over Carrick, Nalesnik, and Mishra is sustained;

the rejection of claim 18 under 35 U.S.C. § 103(a) over Carrick, Nalesnik, Mishra, and VerStrate is sustained; and

the rejection of claims 20 and 22 under 35 U.S.C. § 103(a) over Carrick, Nalesnik, and Ueda is sustained.

Therefore, we affirm the decision of the Examiner.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136.

AFFIRMED

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