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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte RAMNATH N. IYER and SAMUEL H. TERSIGNI

Appeal 2011-005626
Application 11/838,985
Technology Center 1700

Before CHUNG K. PAK, TERRY J. OWENS, and MARK NAGUMO, *Administrative Patent Judges*.

Opinion for the Board by PAK, *Administrative Patent Judge.*

Opinion concurring by NAGUMO, *Administrative Patent Judge*.

DECISION ON APPEAL

The named inventors (hereinafter "Appellants")[1] appeal under 35 U.S.C. § 134(a) from the Examiner's final rejection of claims 1, 3 through 6, 8 through 17, 19, and 21 through 23, all of the claims pending in the above-identified application. We have jurisdiction under 35 U.S.C. § 6(b).

STATEMENT OF THE CASE

The subject matter on appeal is directed to "[c]ompositions … useful

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[1] Appellants identify the real party in interest as "Afton Chemical Corporation." (*See* Appeal Brief filed July 21, 2010 ("App. Br.") at 2.

in … power transmitting applications, for example, in automatic transmissions." (Spec. 1, para 0001.) According to page 2, paragraph 0006, of the Specification, one of such power transmitting compositions, i.e., a power transmitting fluid,

> may comprise a major amount of a base oil; and an additive composition comprising (i) at least one first phosphorus-and boron-containing dispersant in an amount of about 2.0wt % or more in the fluid; (ii) at least one second boron-containing dispersant, free of phosphorus; and (iii) at least one metal-containing detergent. The fluid may have a steel-on-steel coefficient of friction $\mu_{(\text{mid point})}$ of greater than or equal to about 0.13 and a steel-on-paper coefficient of friction μ_{20}/μ_{100} of less than or equal to about 1.0.

These desired steel-on-steel coefficient of friction and steel-on-paper coefficient of friction are "indicative of a transmission without shudder problems" and "improved wet-clutch performance." (Spec. 11, paras. 0055 and 0057.)

Details of the appealed subject matter are recited in representative claims 1, 17, 19, 21, and 22[2] reproduced below from the "CLAIMS APPENDIX" in the Appeal Brief:

1. A power transmitting fluid, comprising:

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[2] Appellants have presented substantive arguments drawn to independent claims 1, 17, 19, 21, and 22 only. (*See* App. Br. 3-11 and Reply Brief filed January 7, 2011("Reply Br.") at 2-4.) Therefore, for purposes of this appeal, we select claims 1, 17, 19, 21, and 22 and decide the propriety of the Examiner's § 103(a) rejections based on these claims alone consistent with 37 C.F.R. § 41.37(c)(1)(vii).

(a) a major amount of a base oil; and
(b) an additive composition comprising
(i) at least one first phosphorus- and boron-containing dispersant in an amount of about 2.0 wt % or more in the fluid;
(ii) at least one second boron-containing dispersant, free of phosphorus; and
(iii) at least one overbased metal-containing detergent;
wherein total amount of phosphorus and boron in the fluid is at least about 708 ppm;
wherein the total amount of phosphorus in the fluid is at least about 300 ppm;
wherein the fluid has a steel-on-steel coefficient of friction $\mu_{(Mid\ Point)}$ of greater than or equal to about 0.13 and
wherein the fluid has a steel-on-paper coefficient of friction μ_{20}/μ_{100} of less than or equal to about 1.0.

17. A continuously variable transmission fluid comprising
(a) a major amount of a base oil; and
(b) an additive composition comprising
(i) at least one first phosphorus- and boron-containing dispersant in an amount of about 2.0 wt % or more in the fluid;
(ii) at least one second boron-containing dispersant, free of phosphorus; and
(iii) at least one overbased metal-containing detergent;
wherein total amount of phosphorus and boron in the fluid is at least about 708 ppm;
wherein the total amount of phosphorus in the fluid is at least about 300 ppm;
wherein the fluid has a steel-on-steel coefficient of friction $\mu_{(Mid\ Point)}$ of greater than or equal to about 0.13 and
wherein the fluid has a steel-on-paper coefficient of friction μ_{20}/μ_{100} of less than or equal to about 1.0.

19. A method for maintaining high steel-on-steel friction and minimizing steel-on-paper friction comprising:

lubricating a transmission with a lubricating composition comprising:

(a) a major amount of a base oil; and

(b) an additive composition comprising

(i) at least one first phosphorus- and boron-containing dispersant in an amount of about 2.0 wt % or more in the fluid;

(ii) at least one second boron-containing dispersant, free of phosphorus; and

(iii) at least one overbased metal-containing detergent;

wherein total amount of phosphorus and boron in the composition is at least about 708 ppm;

wherein the total amount of phosphorus in the composition is at least about 300 ppm;

wherein the fluid has a steel-on-steel coefficient of friction $\mu_{(Mid\ Point)}$ of greater than or equal to about 0.13 and

wherein the fluid has a steel-on-paper coefficient of friction μ_{20}/μ_{100} of less than or equal to about 1.0.

21. A method of increasing steel-on-steel fiction comprising:

lubricating a transmission having steel-on-steel friction with a lubricating composition comprising a major amount of a base oil and an additive composition comprising:

(a) at least one first phosphorus- and boron-containing dispersant in an amount of about 2.0 wt %
or more in the fluid;

(b) at least one second boron-containing dispersant, free of phosphorus; and

(c) at least one overbased metal-containing detergent,

wherein the total amount of boron and phosphorus in the fluid is at least about 708 ppm; and

wherein the total amount of phosphorus in the fluid is at least about 300 ppm.

22. A method of improving anti-shudder comprising:

> lubricating a transmission having shudder with a lubricating composition comprising a major amount of a base oil and an additive composition comprising:
>
> (a) at least one first phosphorus- and boron-containing dispersant in an amount of about 2.0 wt % or more in the fluid;
>
> (b) at least one second boron-containing dispersant, free of phosphorus; and
>
> (c) at least one overbased metal-containing detergent,
>
> wherein the total amount of boron and phosphorus in the fluid is at least about 708 ppm; and
>
> wherein the total amount of phosphorus in the fluid is at least about 300 ppm.

(*See* App. Br. 13 and 15 (Claims App'x).)

Appellants seek review of the following grounds of rejection maintained by the Examiner in the Answer mailed November 10, 2010 ("Ans."):

1. Claims 1, 3 through 6, 8 through 17, 19, and 21 through 23 under 35 U.S.C. § 103(a) as unpatentable over Srinivasan '441;[3]

2. Claims 1, 3 through 6, 8, 9, 14 through 17 and 19[4] under 35 U.S.C. § 103(a) as unpatentable over Srinivasan '441 in view of Chrisope;[5] and

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[3] US 2002/0151441 A1 published in the name of Srinivasan et al. on October 17, 2002.

[4] The Examiner inadvertently extended this rejection to cancelled claims 18 and 20. (*Compare* Ans. 5 *with* App. Br. 2.)

[5] U.S. Patent 5,089,156 issued to Chrisope et al. on February 18, 1992.

3. Claims 1, 13, 15 through 17, 19, and 21 through 23 under 35 U.S.C. § 103(a) as unpatentable over Srinivasan '236[6] in view of Srinivasan '441. (*See* App. Br. 3 and Reply Br. 2.)

DISCUSSION

Srinivansan '441 teaches an automatic transmission fluid (power transmission fluid) comprising a major amount of a base oil and an additive comprising a metal-containing detergent containing no more than 100 ppm of metal, such as a mixture of overbased calcium phenate and overbased calcium sulfonate, about 1.00% to about 10.00 % by weight, preferably about 3.00% to 6.00% by weight, of a dispersant such as "at least one oil-soluble phosphorus or boron-containing [succinimide] ashless dispersant," or "dispersants or the phosphorus-containing [succinimide ashless] dispersants of the present invention [that] are also boronated," and a friction modifier. (Ans. 3-4; *see also* Srinivansan '441, paras. 0020, 0032, 0035, 0036, 0037, 0044-0046, 0058, 0060, 0063, and 0064.)

Appellants contend that Srinivansan '441 does not mention using both a phosphorus-and boron-containing dispersant and a boron-containing dispersant free of phosphorus and do not mention the total amounts of phosphorus and a combination of phosphorus and boron and used in its automatic transmission fluid. (App. Br. 4-7.) Appellants also contend that Srinivansan '441 does not teach or suggest a steel-on-steel coefficient of friction and a steel-on-paper coefficient of friction, which are "indicative of

[6] U.S. Patent 5,578,236 issued to Srinivasan et al. on November 26, 1996.

a transmission without shudder problems" and "improved wet-clutch performance." (App. Br. 6 and Spec. 11, paras. 0055 and 0057.) Further, Appellants contend that neither Chrisope nor Srinivasan '236 would have suggested employing both a phosphorus-and boron-containing dispersant and a boron-containing dispersant free of phosphorus and the total amount of phosphorus and boron and the total amount of phosphorus in the automatic transmission fluid taught by Srinivansan '441. (App. Br. 7-11.)

Thus, the first critical question is:

Has the Examiner reversibly erred in finding that one of ordinary skill in the art would have been led to employ both a phosphorus-and boron-containing dispersant and a boron-containing dispersant free of phosphorus to provide the combined amount of phosphorus and boron and the amount of phosphorus recited in claims 1, 17, 19, 21, and 22 in the automatic transmission fluid taught by Srinivansan '441, with a reasonable expectation of obtaining a transmission without a shudder problems and improving wet-clutch performances which are indicative of the steel-on-steel coefficient of friction and steel-on-paper coefficient of friction recited in claims 1, 17, 19, 21 and 22? On this record, we answer this question in the negative.

As correctly found by the Examiner at pages 5, 6, and 18 of the Answer, Srinivansan '441 teaches a dispersant "*comprising at least one* oil-soluble phosphorus or boron-containing ashless dispersant" with the phosphorus ashless dispersant being one that is further boronated (emphasis added). (*See also* Srinivansan '441, paras. 0046 and 0058.) Srinivansan '441 also teaches that using two or more dispersants in its automatic

transmission fluid or any automatic transmission fluid is known. (Ans. 18 and Srinivansan '441, paras. 0011- 0013.) Further, Srinivansan '441 teaches that a known power transmission fluid (automatic transmission fluid) with "enhanced performance characteristics" can be formed by including, "inter alia, an oil-soluble boron content of about 0.001 to about 0.1% (about 10 ppm to about 1000ppm of the boron content), an oil soluble phosphorus content of about 0.005 to about 0.2% (about 50ppm to about 2000ppm of phosphorus), and an oil soluble metal additive [(an oil soluble metal-containing detergent)] content of from 0 to about 100ppm." (Ans. 15 and Srinivansan '441, para. 005.)

Notwithstanding Appellants' arguments to the contrary at pages 7 through 11 of the Appeal Brief, Chrisope and Srinivansan '236, like Srinivansan '441, teaches employing an oil soluble phosphorus-containing succinimide ashless dispersant, an oil soluble boron-containing succinimide ashless dispersant, *and/or* an oil soluble phosphorus- and boron-containing succinimide ashless dispersant in its oleaginous liquids, such as automatic transmission fluids, containing, inter alia, a base oil and a metal-containing detergent having no more than about 100 ppm of metal (devoid or substantially devoid of metal-containing components).[7] (Chrisope, col. 8, l. 48 to col. 9, l. 21, col. 10, ll. 4-8, col. 12, ll. 5-10 and Srinivansan '236, col. 1, ll. 8-10, col. 1, l. 45 to col. 2, l. 2, col. 9, ll. 30-32 and 44-56, col. 10, ll. 1-11, col. 12, ll. 26-36 and col. 13, ll. 3-8.) Chrisope and Srinivansan '236 also teach that such dispersants can also function as antiwear/extreme

[7] Boron and phosphorus are not metals.

pressure agents. (Chrisope, col. 1, ll. 58-62 and Srinivansan ‘236, col. 9, ll. 23-25.) Srinivansan ‘236, like Srinivansan ‘441, further teaches a power transmission fluid (automatic transmission fluid) with “enhanced performance capabilities” having, inter alia, “an oil-soluble boron content of about 0.001 to about 0.1% [(about 10ppm to about 1000ppm of the boron content)], an oil soluble phosphorus content of about 0.005 to about 0.2% [(about 50ppm to about 2000ppm of phosphorus)], and an oil soluble metal [(an oil soluble metal-containing detergent)] content of from 0 to about 100ppm. Although Chrisope and Srinivansan ‘236 exemplify using only a phosphorus- and boron- containing succinimide as their ashless dispersant, they are not limited by their examples as is apparent from their broader teachings discussed above. *See In re Fracalossi*, 681 F.2d 792, 794 n.1 (CCPA 1982); *In re Mills*, 470 F.2d 649, 651 (CCPA 1972).

Moreover, Srinivansan ’441, at paragraphs 0003, 0012, 0020, 0022, and 0024, teaches employing these dispersants, with a metal containing detergent and a friction modifier, in its automatic transmission fluid to provides “excellent slip-stick characteristics, anti-shudder performance, and friction durability” to meet the stringent demands and frictional requirements of electronically controlled converter clutch (ECCC) transmissions and continuously variable transmissions (CVT), including “wet clutch performance,” which according to Appellants at paragraphs 0055 and 0057 of page 11 of the Specification, correspond to the steel-on-steel coefficient of friction $\mu_{(\text{mid point})}$ of greater than or equal to about 0.13 and steel-on-paper coefficient of friction μ_{20}/μ_{100} of less than or equal to about 1.0 recited in

claims 1, 17, 19, 21, and 22. Srinivansan ’441 also teaches using an automatic transmission fluid to obtain desired coefficients of friction under the ECCC friction durability tests. (*See* Figs. 1-6.) The Examiner finds, and Appellants do not specifically dispute, that Figures 1 and 6 of Srinivansan ‘441 illustrate a steel-on-steel coefficient of friction of greater than or equal to about 0.13 at different speeds and Figures 2 and 5 of Srinivansan ‘441 illustrate a steel-on-paper coefficient of friction of less than or equal to about 1.0. (*Compare* Ans. 21 *with* App. Br. 3-11 and Reply Br. 2-4; *see also* Srinivansan ’441, Figs. 1, 2, 5, and 6,)

Given the above teachings, we concur with the Examiner that one of ordinary skill in the art, armed with the teachings of Srinivansan ‘441 alone or the collective teachings of Srinivansan ‘441 and Chrisope, or Srinivansan ‘236’and Srinivansan ‘441, would have been led to employ, *inter alia*, a combination of an oil soluble phosphorus-and boron-containing succinimide ashless dispersant, *and* an oil soluble boron-containing succinimide ashless dispersant to provide the total amount of phosphorus and boron and the total amount of phosphorus encompassing those recited in claims 1, 17, 19, 21, and 22 in Srinivansan ‘441’s automatic transmission fluid (power transmission fluid), with a reasonable expectation of successfully obtaining enhanced performance characteristics or capabilities corresponding to the to the steel-on-steel coefficient of friction and steel-on-paper coefficient of friction recited in claims 1, 17, 19, 21, and 22. *KSR Int’l Co. v. Teleflex Inc.*, 550 U.S. 398, 417(2007) (*quoting Sakraida v. Ag Pro, Inc.*, 425 U.S. 273, 282 (1976) (“[W]hen a patent ‘simply arranges old elements with each

performing the same function it had been known to perform' and yields no more than one would expect from such an arrangement, the combination is obvious.")*; In re Peterson*, 315 F.3d 1325, 1329 (Fed. Cir. 2003)("In cases involving overlapping ranges, we and our predecessor court have consistently held that even a slight overlap in range establishes a *prima facie* case of obviousness."); *In re Kerkhoven*, 626 F.2d 846, 850 (CCPA 1980) ("It is prima facie obvious to combine two compositions each of which is taught by the prior art to be useful for the same purpose, in order to form a third composition which is to be used for the very same purpose.")

Appellants contend that "the presently claimed unique combination provides unexpected, synergistic benefits that are not merely additive." (App. Br. 3 and Reply Br. 2.) In support of this contention, Appellants refer to the data in Tables 2 and 3 of the Specification. (App. Br. 3-4 and Reply Br. 2-4.) According to Appellants, Example 2 in the Tables supposedly representative of the claimed subject matter "provides both satisfactory performance with steel-on-steel friction and steel-on-paper friction" whereas Examples 6 and 7 in the Tables supposedly representative of prior art "do not provide good performance with steel-on-steel coefficient of friction." (App. Br. 4.)

Thus, the second critical question is:

Have Appellants demonstrated that the Specification evidence relied upon shows that the claimed subject matter as a whole imparts unexpected results relative to the closest prior art, Example 3 of Srinivansan '441 or

Example 4 of Srinivansan '236? On this record, we answer this question in the negative.

It is well settled that Appellants bear the initial burden of supplying sufficient factual evidence to show that the claimed invention as a whole imparts unexpected results. *In re Geisler*, 116 F.3d 1465, 1470 (Fed. Cir. 1997); *In re Freeman*, 474 F.2d 1318, 1324 (CCPA 1973); *In re Klosak*, 455 F.2d 1077, 1080 (CCPA 1972). That burden requires Appellants to show that the Specification evidence of unexpected results is derived from a comparison between the claimed subject matter and the closest prior art and is reasonably commensurate in scope with the claimed subject matter. *See, e.g., In re Harris*, 409 F.3d 1339, 1344 (Fed. Cir. 2005) ("Even assuming that the results were unexpected, Harris needed to show results covering the scope of the claimed range. Alternatively Harris needed to narrow the claims."); *In re Baxter Travenol Labs.*, 952 F.2d 388, 392 (Fed. Cir. 1991) ("[W]hen unexpected results are used as evidence of nonobviousness, the results must be shown to be unexpected compared with the closest prior art."); *In re Greenfield*, 571 F.2d 1185, 1189 (CCPA 1978) ("Establishing that one (or a small number of) species gives unexpected results is inadequate proof, for 'it is the view of this court that objective evidence of non-obviousness must be commensurate in scope with the claims which the evidence is offered to support.'")

Here, Examples 2, 6, and 7 in Tables 2 and 3 relied upon by Appellants do not specify the twelve ingredients and their amounts employed in power transmission fluids. (Spec. 9-11, paras. 0048-0060,

particularly Tables 1-3.) Dispersant A employed, for example, is only identified as including "a phosphorylated and boronated dispersant containing about 0.76 wt% phosphorus (P)" while dispersant B employed is only identified as including "a boronated dispersant containing about 1.3% B." (Spec. 9, para. 0049.) Example 2, which is closest to the claimed subject matter, employed an additive containing, *inter alia*, 4 wt% of dispersant A, 2 wt% of dispersant B, and 0.45 wt% of detergent C to provide 300 ppm of phosphorus, and 708 ppm of boron and phosphorus to a fluid containing an unidentified base oil to obtain a steel-on-steel friction of 0.139 and a steel-on-paper friction of 0.96. (Spec. 10, paras. 0052 and 0054, Tables 2 and 3.) Examples 6, which is closest to Srinivansan '441 or Srinivansan '236, employed an additive containing, *inter alia*, 4 wt% of dispersant A and 0.45 wt% of detergent C to provide 300 ppm of phosphorus, and 448 ppm of boron and phosphorus to a fluid having an unidentified base oil to obtain a steel-on-steel friction of 0.128 and a steel-on-paper friction of 0.96. (*Id*.) Example 7 employed an additive containing, *inter alia*, 2 wt% of dispersant A (which is less than those exemplified in Srinivansan '441 or Srinivansan '236) and 0.45 wt% of detergent C to provide 150 ppm of phosphorus and 224 ppm of boron and phosphorus to a fluid having an unidentified base oil to obtain a steel-on-steel friction of 0.113 and a steel-on-paper friction of 0.921. (*Id*.)

As correctly found by the Examiner in the Answer, Appellants' reliance on the Specification evidence as demonstrating unexpected results over the closest prior art reference, Example 3 of Srinivansan '441 or

Example 4 of Srinivansan ‘236, is misplaced. It is not clear from the data in Tables 2 and 3 whether any improvements in a steel-on-steel friction and/or a steel-on-paper friction are due to the claimed unique combination, the greater amount of dispersants employed, “minor variations in some of the other components in the fluids” mentioned in page 10, paragraph 0052 of the Specification, the exclusion of the ingredients exemplified in Srinivansan ‘441 or Srinivansan ‘236, but included in the claims on appeal, or the margin of error attributed to the testing means discussed at page 11, paragraph 0059 of the Specification. *In re Dunn*, 349 F.2d 433, 439 (CCPA 1965). (“While we do not intend to slight the alleged improvements, we do not feel it an unreasonable burden on appellants to require comparative examples relied on for non-obviousness to be truly comparative. The cause and effect sought to be proven is lost here in the welter of unfixed variables.”) Nor is it clear whether the claimed subject matter was directly or indirectly compared with the closest prior art, namely Example 3 of Srinivansan ‘441 and Example 4 of Srinivansan ‘236, since Appellants fail to direct us to any meaningful side-by-side comparison in which the inventive experiment was identical to Example 3 of Srinivansan ‘441 and Example 4 of Srinivansan ‘236, except for the novel dispersant combination, including the total amount of phosphorus and the total amount of phosphorus and boron, recited in claims 1, 17, 19, 21, and 22. This is particularly so since Examples 1 through 11 in Tables 2 and 3 of the Specification indicate that the results can vary depending on various different variables employed, including the amount of specific detergent C employed and the amount of specific dispersant A

employed. Further, Srinivansan ’441 teaches the importance of employing its specific ingredients to obtain “excellent slip-stick characteristics, anti-shudder performance, and friction durability” to meet the stringent demands and frictional requirements of electronically controlled converter clutch (ECCC) transmissions and continuously variable transmissions (CVT), including “wet clutch performance,” which according to Appellants at paragraphs 0055 and 0057 of page 11 of the Specification, correspond to the steel-on-steel coefficient of friction $\mu_{(mid\ point)}$ of greater than or equal to about 0.13 and steel-on-paper coefficient of friction μ_{20}/μ_{100} of less than or equal to about 1.0 recited in claims 1, 17, 19, 21, and 22 as indicated *supra*. Moreover, Appellants have not disputed the Examiner’s finding that Srinivansan ‘441 itself teaches the steel-on-steel coefficient of friction of greater than or equal to about 0.13 and steel-on-paper coefficient of friction of less than or equal to about 1.0 recited in claims 1, 17, 19, 21, and 22 as indicated s*upra*. In other word, contrary to Appellants’ arguments, Appellants have not shown that the claimed results are unexpected from the teachings of the closest prior art, Srinivansan ‘441. (*See also* Ans. 15-16.) Indeed, nowhere does the Specification state or aver that the improvements in a steel-on-steel friction and/or a steel-on-paper friction in Tables 2 and 3 are unexpected by one of ordinary skill in the art. *Geisler*,116 F.3d at 1470.

As also correctly found by the Examiner, the showing in Tables 2 and 3 of the Specification is not reasonably commensurate in scope with claims 1, 17, 19, 21, and 22 on appeal. While the showing relied upon by Appellants is limited to a power transmission fluid having specific steel-on-

steel friction and steel-on-paper friction values based one specific additive comprising the specific amounts of specific ingredients and an unknown amount of an unknown base oil, the claims are not so limited. The claims embrace a myriad of power transmission fluids having a steel-on-steel friction value outside of that shown in Table 2 and containing multifarious additives containing, *inter alia*, various amounts of numerous boron/phosphorus containing dispersants, boron containing dispersants, overbased metal detergents, and various amounts of numerous base oils, which are materially different from those employed in Tables 2 and 3. The myriad of power transmission fluids covered by the claims on appeal are also open to a variety of materially different additives, including those employed in Tables 2 and 3 of the Specification or disclosed in the Specification, but not explicitly recited in the claims on appeal. On this record, Appellants have not shown that the results obtained by Example 2 in Tables 2 and 3 are predictive of the multifarious ingredients encompassed by the claims on appeal.

Accordingly, having fully considered and weighed the evidence of record advanced by the Examiner and Appellants, we determine that the weight of the evidence taken as a whole supports the Examiner's conclusion of obviousness within the meaning of 35 U.S.C. § 103(a).

ORDER

Upon consideration of the record, and for the reasons given above and in the Answer, it is

ORDERED that the decision of the Examiner rejecting claims 1, 3 through 6, 8 through 17, 19, and 21 through 23under 35 U.S.C. § 103(a) as unpatentable over Srinivasan ‘441 is AFFIRMED;

FURTHER ORDERED that the decision of the Examiner rejecting claims 1, 3 through 6, 8, 9, 14 through 17, and 19 under 35 U.S.C. § 103(a) as unpatentable over Srinivasan ‘441 in view of Chrisope is AFFIRMED;

FURTHER ORDERED that the decision of the Examiner rejecting claims 1, 13, 15 through 17, 19, and 21 through 23 under 35 U.S.C. § 103(a) as unpatentable over Srinivasan ‘236 in view of Srinivasan ‘441 is AFFIRMED; and

FURTHER ORDERED that no time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a)(1)(iv).

AFFIRMED

NAGUMO, *Administrative Patent Judge*, concurs.

I agree that harmful error has not been demonstrated in the Examiner's rejections. I write separately to emphasize that although the fact of overlapping ranges is not, by itself, dispositive of the legal issue of prima facie obviousness, Appellant has not shown that the range disclosed by the prior art is "so broad as to encompass a very large number of possible distinct compositions," or that the art was sufficiently unpredictable, that routine optimization would not have led to the claimed invention. *In re Peterson*, 315 F.3d 1325, 1330 n.1 (Fed. Cir. 2003). Similarly, the limited showing in the Specification does not demonstrate, in my judgment, that the threshold of at least about 300 ppm phosphorus and at least about 408 ppm boron in the claimed power-transmitting fluids provides a sufficiently distinct benefit to be denominated an unexpected result that out-weighs the evidence and argument advanced by the Examiner in favor of obviousness.

sld