



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
15/421,621	02/01/2017	Eduardo Torres	6801B	1011
25280	7590	09/18/2020	EXAMINER	
Legal Department (M-495) P.O. Box 1926 Spartanburg, SC 29304			HAVLIN, ROBERT H	
			ART UNIT	PAPER NUMBER
			1639	
			MAIL DATE	DELIVERY MODE
			09/18/2020	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte EDUARDO TORRES and
GREGORY SCOT MIRACLE

Appeal 2020-000828
Application 15/421,621
Technology Center 1600

Before RICHARD M. LEBOVITZ, JASON V. MORGAN, and
DEBORAH KATZ, *Administrative Patent Judges*.

MORGAN, *Administrative Patent Judge*.

DECISION ON APPEAL
STATEMENT OF THE CASE

Introduction

Pursuant to 35 U.S.C. § 134(a), Appellant¹ appeals from the Examiner's decision to reject claims 1, 5–8, 10, 14, and 16. Claims 2–4, 9, 11–13, 15, and 17 are withdrawn. Final Act. 1; Amend. 2–5 (Sept. 4, 2018). We have jurisdiction under 35 U.S.C. § 6(b).

We AFFIRM.

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

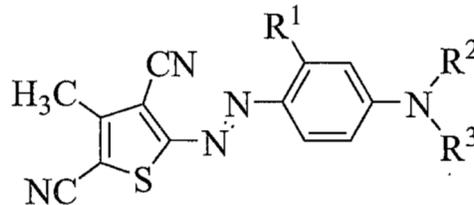
Summary of the Disclosure

Appellant's claimed subject matter relates to "[I]aundry care compositions comprising thiophene azo carboxylate fabric shading dyes and methods of treating a textile comprising such laundry care compositions."

Abstract.

Representative Claim (Key Limitations Emphasized)

1. A composition comprising a thiophene azo carboxylate dye having the structure of Formula I:



Formula I

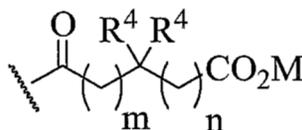
wherein R¹ is selected from the group consisting of H and electron-withdrawing groups; wherein R² is (CH₂CH₂O)_yQ and R³ is (CH₂CH₂O)_{y'}Q';

wherein y and y' are integers independently selected from 1 to 39,

wherein $8 \leq (y + y') \leq 40$;

wherein Q and Q' are independently selected from the group consisting of H and Y wherein Y is as defined below; with the proviso that the dye comprises at least one Q or Q' group that is Y;

and wherein Y is an organic radical represented by Formula II



Formula II

wherein independently for each Y group,

M is H or a charge balancing cation; m is 0 to 5; n is 0 to 5; the sum of $m + n$ is 1 to 10; each R^4 is independently selected from the group consisting of H, C_{3-18} linear or branched alkyl, and C_{3-18} linear or branched alkenyl.

Appellant previously elected a species without traverse described as:

R^1 = hydrogen
Q = Y
Q' = Y
 R^4 = hydrogen
m = 0 or 1
n = 0 or 1
M = Na^+

Appeal Br. 2; Response to Restriction Requirement (Oct. 23, 2017).

The Examiner's rejections and cited references

The Examiner rejects claims 1, 5–8, 10, 14, and 16 under 35 U.S.C. § 103 as being unpatentable over Valenti et al. (US 2012/0178665 A1; published July 12, 2012) (“Valenti ’665”) and Kluger et al. (US 4,912,203; issued Mar. 27, 1990) (“Kluger”). Final Act. 3–9; Ans. 3–8.

The Examiner rejects claims 1, 5–8, 10, 14, and 16 under 35 U.S.C. § 103 as being unpatentable over Miracle et al. (US 2012/0304398 A1; published Dec. 6, 2012) (“Miracle ’398”), Valenti ’665, and Kluger. Final Act. 9–10; Ans. 8–10.

The Examiner rejects claims 1, 5–8, 10, 14, and 16 on grounds of nonstatutory obviousness-type double patenting as being unpatentable over claims 1–12 of Torres et al. (US 9,163,146 B2; issued Oct. 20, 2015) (“Torres ’146”) in view of Valenti ’665 and Kluger. Final Act. 10; Ans. 10–11.

The Examiner rejects claims 1, 5–8, 10, 14, and 16 on grounds of nonstatutory obviousness-type double patenting as being unpatentable over claims 1–7 Miracle (US 8,993,508 B1; issued Mar. 31, 2015) (“Miracle ’508”) in view of Valenti ’665 and Kluger. Final Act. 10; Ans. 11–13.

The Examiner rejects claims 1, 5–8, 10, 14, and 16 on grounds of nonstatutory obviousness-type double patenting as being unpatentable over claims 1–19 of Miracle et al. (US 8,888,865 B2; issued Nov. 18, 2014) (“Miracle ’865”) in view of Valenti ’665 and Kluger. Final Act. 10–11; Ans. 13–14.

The Examiner rejects claims 1, 5–8, 10, 14, and 16 on grounds of nonstatutory obviousness-type double patenting as being unpatentable over claims 9–16 of Miracle et al. (US 8,858,651 B2; issued Oct. 14, 2014) (“Miracle ’651”) in view of Valenti ’665 and Kluger. Final Act. 11; Ans. 14–15.

The Examiner rejects claims 1, 5–8, 10, 14, and 16 on grounds of nonstatutory obviousness-type double patenting as being unpatentable over claims 1 and 2 of Valenti et al. (US 8,138,222 B2; issued Mar. 20, 2012) (“Valenti ’222”) in view of Valenti ’665 and Kluger. Final Act. 11; Ans. 15–17.

The Examiner rejects claims 1, 5–8, 10, 14, and 16 on grounds of nonstatutory obviousness-type double patenting as being unpatentable over claims 1–9 of Valenti et al. (US 8,022,100 B2; issued Sept. 20, 2011) (“Valenti ’100”) in view of Valenti ’665 and Kluger. Final Act. 11; Ans. 17–18.

The Examiner rejects claims 1, 5–8, 10, 14, and 16 on grounds of nonstatutory obviousness-type double patenting as being unpatentable over

claims 1–12 of Valenti et al. (US 7,642,282 B2; issued Jan. 5, 2010) (“Valenti ’282”) in view of Valenti ’665 and Kluger. Final Act. 12; Ans. 18–20.

The Examiner rejects claims 1, 5–8, 10, 14, and 16 on grounds of nonstatutory obviousness-type double patenting as being unpatentable over claims 1–10 of Miracle (US 9,267,098 B2; issued Feb. 23, 2016) (“Miracle ’098”) in view of Valenti ’665 and Kluger. Final Act. 12; Ans. 20–21.

The Examiner rejects claims 1, 5–8, 10, 14, and 16 on grounds of nonstatutory obviousness-type double patenting as being unpatentable over claims 1–19 Miracle et al. (US 9,371,507 B2; issued June 21, 2016) (“Miracle ’507”) in view of Valenti ’665 and Kluger. Final Act. 12; Ans. 21–22.

The Examiner withdraws the rejection of claims 1, 5–8, 10, 14, and 16 on grounds of nonstatutory obviousness-type double patenting as being unpatentable over claims 1–17 of Torres et al. (US App. No. 14/476,847) (“Torres ’847”) in view of Valenti ’665 and Kluger because Torres ’847 is abandoned. Final Act. 13; Ans. 22–23; Notice of Abandonment, US App. No. 14/476,847 (May 7, 2018).

ADOPTION OF EXAMINER’S FINDINGS AND CONCLUSIONS

We agree with and adopt as our own the Examiner’s findings as set forth in the Answer and in the Action from which this appeal was taken, and we concur with the Examiner’s conclusions. We have considered Appellant’s arguments, but do not find them persuasive of error. We provide the following explanation for emphasis.

ANALYSIS

35 U.S.C. § 103 (Valenti '665 and Kluger)

In rejecting claim 1 as obvious over Valenti '665 and Kluger, the Examiner finds that whitening agent example number 10 of Valenti '665—identified as Violet thiophene_5EO_COCH₂CHR₄COOH_RC₈H₁₇—teaches or suggests a compound similar in structure to the compound of claim 1. Final Act. 3–7 (citing, e.g., Valenti '665 ¶¶ 30–40, 155, 168, Table 1A).

The Examiner finds that “[t]he difference between the Valenti ['665] compound example 10 and [the compound recited in claim 1] is the number of repeating polymer units EO (ethylene oxide) and the R₄ of CH₃ vs. H.” Final Act. 7. The Examiner also finds claim 1 requires “between 8 and 40 [repeating polymer units EO] while the prior art teaches an example with the value of 5 along with the preferred range of 2 to 20 (more preferably 2 to 10).” *Id.* The Examiner concludes:

One of ordinary skill in the art would be well versed in techniques of optimizing the chemical structure of a compound to improve physico-chemical properties of the whitening agent. One of ordinary skill in the art would consider routine and well within their technical grasp the process of altering the length of a polymeric unit such as EO to tune physical properties and optimize molecular size for a given application. Valenti ['665] specifically describes such an optimization using the Hansen solubility parameter^[2] and physical trapping on the substrate.

Id. (citing Valenti '665 ¶¶ 44, 47).

Appellant does not dispute the Examiner's findings and conclusions regarding the combined teachings and suggestions of Valenti '665 and

² Both the Examiner and Appellant refer to the dispersion component δ_d of the Hansen Solubility Parameter as simply “Hansen Solubility Parameter” or “HSP.” *See, e.g.,* Final Act. 7; Appeal Br. 5.

Kluger. Rather, Appellant argues that Valenti '665 teaches away from claim 1, which Appellant argues is directed to molecules suitable as shading dyes that are larger than the whitening agents Valenti '665 teaches are suitable. Appeal Br. 5. Specifically, Appellant argues that Valenti '665 “repeatedly, over and over again, describes the importance of [a Hansen Solubility Parameter (HSP) dispersion component] less than or equal to 17 MPa^{0.5}.” *Id.* (citing Valenti '665 ¶¶ 179, 186, Figure 1). Appellant argues Valenti '665 teaches that whitening agent example 10, in contrast, “has a Hansen Solubility Parame[ter dispersion component] of 18.5 MPa^{0.5}.” *Id.* (citing Valenti '665 Table 4).

The Examiner acknowledges that Valenti '665 whitening agent example 10 has an HSP dispersion component of 18.5. Ans. 23 (citing Valenti '665 Table 4). But the Examiner notes that “[a]lthough the cited parts of Valenti [’665] show that the color value b is . . . *correlated* with [the HSP dispersion component], it does not show that the cited art teaches away from the claimed invention.” *Id.* at 25 (emphasis added).

While Valenti '665 teach that compounds with an HSP dispersion component less than or equal to about 17 MPa^{0.5} are “ideal” for use in laundry care, Valenti does not restrict the compounds useful for this purpose to such value, but rather discloses that compounds having this value are “preferable.” Valenti '665 ¶¶ 2, 45 (cited in Appeal Br. 5). Specifically, Valenti teaches that there is “a relatively linear correlation between the blueing parameter, CIELab b*, and the dispersion component value of the Hansen Solubility Parameter,” such that the “color value b* decreases (i.e., [blueing performances increases] linearly as δ_d decreases).” *Id.* ¶ 179 (cited in Final Act. 8; Ans. 24). This blueing performance is desirable in a whitening

agent because the color of textile substrates tend to fade and yellow as they age “due to exposure to light, air, soil, and natural degradation of the fibers,” thus use of blueing agents as whitening agents visually brightens textile substrates by counteracting such fading and yellowing. Valenti ’665 ¶ 3. Therefore, Valenti ’665 does not teach that compounds with an HSP dispersion component greater than 17 MPa^{0.5} are not useful, but rather at most might imply they are *less* than “ideal” and not “preferable” (i.e., that they are inferior).

Simply because a product is described as or implied to be “inferior” does not by itself constitute a teaching away from using the “inferior” product. *In re Gurley*, 27 F.3d 551, 553 (Fed. Cir. 1994). “[J]ust because better alternatives exist in the prior art does not mean that an inferior combination is inapt for obviousness purposes.” *In re Mouttet*, 686 F.3d 1322, 1334 (Fed. Cir. 2012). Moreover, a teaching away is not dispositive, but instead represents “a significant factor to be *considered* in determining unobviousness.” *Gurley*, 27 F.3d at 553 (emphasis added). That is, although it is “a useful general rule” that a reference that teaches away should not be relied on to make a prima facie case of obviousness, “such a rule can not be adopted in the abstract, for it *may not be applicable* in all factual circumstances.” *Id.* (emphasis added). Thus, “the nature of the teaching is highly relevant, and must be weighed in substance.” *Id.*

Here, Valenti ’665 explicitly identifies example number 10 as one of a number of “Inventive Whitening Agents” used to train (through linear regression) models that use a compound’s HSP dispersion component to *predict* the compound’s efficacy. Valenti ’665, Table 1A (cited in Final Act. 4); *id.* ¶ 179, Fig. 1 (cited in Appeal Br. 5); *id.* ¶¶ 180–82. Specifically,

Valenti '665 teaches there is a “linear correlation between . . . color value[s] b^* . . . [and] δd ” (Valenti '665 ¶ 179 (cited in Final Act. 8) (emphasis added)). The color value b (“CIELab b^* ”) indicates the whitening activity of a compound with lower values indicating more whitening activity.

Whitening agent example 10 in fact has a lower CIELab b^* than several compounds with HSP dispersion component values of 17 or below. This can be seen in Figure 1 of Valenti '665 (cited in Appeal Br. 5), which is reproduced below.

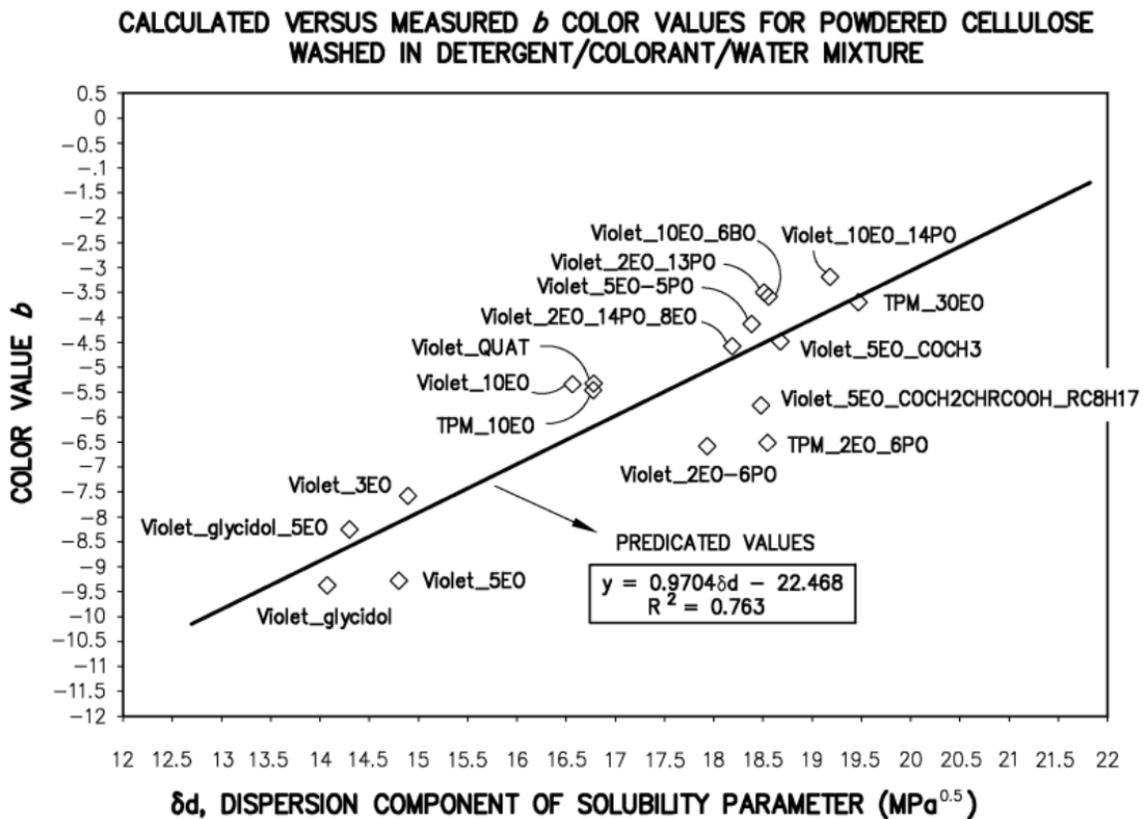


Figure 1 of Valenti '665 depicts the dispersion component of the solubility parameter in relation to the “COLOR VALUE b ” of various compounds described in Valenti '665. Diamonds show the actual measured

color value b and a line shows the predicted values as calculated from equations described in Valenti '665.

Figure 1 of Valenti '665 shows that the whitening agent example number 10, labeled as "Violet_5EO_COCH2CHRCOOH_RC8H17," has an HSP dispersion component of 18.5 and a measured color value b of -5.76 . Valenti '665, Tables 1A, 4. Figure 1 of Valenti '665 depicts three whitening agents having HSP dispersion components less than or equal to 17, the preferred range of Valenti '665, yet having measured color values b greater than (i.e., inferior to) the measured color value b for whitening agent example number 10. Specifically, example 3 (Violet thiophene_10EO, labeled "Violet_10EO") has an HSP dispersion component of 16.6 and a measured color value b of -5.34 . *Id.* Example 14 (Violet thiophene_QUAT, labeled "Violet_QUAT") has an HSP dispersion component of 16.8 and a measured color value b of -5.36 . *Id.* And example 15 (Triphenylmethane_10EO, labeled "TPM_10EO") has an HSP dispersion component of 16.8 and a measured color value b of -5.46 . *Id.* Thus, while example 10 has an HSP dispersion component of 18.5, which is above the preferred value of 17, example 10 also has a color value b that is lower (and thus better) than compounds having an HSP in the preferred range.

Valenti '665 provides additional evidence that whitening agent example 10 is more effective than these three compounds in disclosing that whitening agent example 10 has a Ganz Whiteness Index value of 127.03, which is higher (i.e., that has "more blueing[] or whitening effect") than the Ganz Whiteness Index values of examples 3 (118.09), 14 (119.92), and 15 (125.44). *Id.* ¶ 175, Table 3.

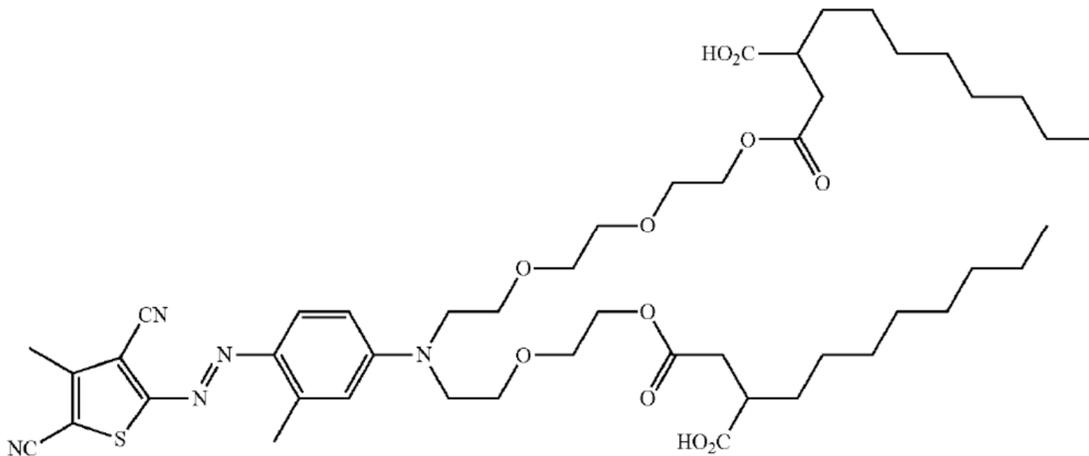
Given that Valenti '665 provides evidence that whitening agent example 10—the compound the Examiner cites in rejecting claim 1 as obvious—is *more effective* as a whitening agent than some compounds with HSP dispersion components less than or equal to 17, we agree with the Examiner that Valenti '665 does not teach away from the use of whitening agent example 10. Ans. 25.

Accordingly, we sustain the Examiner's 35 U.S.C. § 103 rejection, based on the combined teachings and suggestions of Valenti '665 and Kluger, of claim 1, and claims 5–8, 10, 14, and 16, which Appellant does not argue separately with respect to this rejection. Appeal Br. 4–5.

35 U.S.C. § 103 (Miracle '398, Valenti '665, and Kluger)

With respect to the Examiner's 35 U.S.C. § 103 rejection of claim 1 as being obvious over Miracle '398, Valenti '665, and Kluger, Appellant explicitly relies on the arguments Appellant makes based on the Examiner's 35 U.S.C. § 103 rejection of claim 1 based on Valenti '665 and Kluger. Appeal Br. 6. These arguments are not persuasive for the reasons discussed above.

Appellant further argues that “Miracle ['398] teaches the exclusion of Example 10 of Valenti ['665], thereby strengthening the argument above that the combination of reference teache[s] the unsuitability of thiophene compounds such as Example 10 from Valenti ['665].” Appeal Br. 6. Appellant's characterization of Miracle '398 as excluding whitening agent example 10 from Valenti '665 accords with the proviso in Miracle '398 regarding “a thiophene azo carboxylate dye containing a carboxylic acid moiety” that excludes structures such as:



Miracle '398 ¶ 25, claim 1. But as the Examiner correctly notes, “there is no technical reason for one of ordinary skill in the art not to consider a compound ‘provisoed’ out of a claim.” Ans. 26. Appellant fails to identify anything in Miracle '398 to show that this minimalistic proviso criticizes, discredits, or otherwise discourages use of such compounds. *In re Fulton*, 391 F.3d 1195, 1201 (Fed. Cir. 2004). Rather, this proviso merely limits the scope of infringement of claim 1 of Miracle '398. Therefore, we agree with the Examiner that Miracle '398, Valenti '665, and Kluger do not teach away from the invention of claim 1.

Accordingly, we sustain the Examiner’s 35 U.S.C. § 103 rejection, based on Miracle '398, Valenti '665, and Kluger, of claim 1, and claims 5–8, 10, 14, and 16, which Appellant does not argue separately with respect to this rejection. Appeal Br. 6.

Obviousness-Type Double Patenting

Claims 1–12 of Torres '146, Valenti '665, and Kluger
Claims 1 and 2 of Valenti '222, Valenti '665, and Kluger
Claims 1–9 of Valenti '100, Valenti '665, and Kluger
Claims 1–12 of Valenti '282, Valenti '665, and Kluger
Claims 1–19 of Miracle '865, Valenti '665, and Kluger
Claims 9–16 of Miracle '651, Valenti '665, and Kluger

Appellant argues the Examiner erred in rejecting claim 1 on grounds of obviousness-type double patenting, based on claims 1–12 of Torres '146 in view of Valenti '665 and Kluger, because

there is no teaching or suggestion in the **claims** of [Torres '146] to modify the dye of [Torres] '146 to create the claimed thiophene azo carboxylate dye which differs at least by the $y + y'$ chain length of 8 to 40 (versus a value of 4 in [Torres '146]) and by the absence of the G moiety (e.g., a substituted succinic anhydride).

Appeal Br. 7. Appellant's arguments with respect to claims 1–12 of Torres '146 alone do not, however, show error in the Examiner's reliance on claims 1–12 of Torres '146 *in combination with* Valenti '665 and Kluger. Ans. 10–11, 27.

In particular Appellant does not address the Examiner's findings with respect to Valenti '665, but instead argues “that which is **disclosed** in [Valenti '665] cannot be used as the basis of a nonstatutory obviousness-type double patenting rejection of” claim 1; rather, “only that which is recited in the claims of **a patent** can be used as the basis of such a rejection.” Appeal Br. 7 (citing MPEP § 804 II(B)(2)(a); *Gen. Foods Corp. v. Studiengesellschaft Kohle mbH*, 972 F.2d 1272 (Fed. Cir. 1992)).

Appellant's arguments are unpersuasive because, as the Examiner correctly notes, Valenti '665 “quali[fies] as 35 [U.S.C.] § 102(a)(1) prior art, published more than 1 year before the earliest priority date of the instant

application.” Ans. 27. Obviousness-type double patenting rejections are analogous to obviousness rejections under 35 U.S.C. § 103 even though “that section is not itself involved in double patenting rejections because the patent principally underlying the rejection is not prior art.” *In re Braithwaite*, 379 F.2d 594, 600 n.4 (CCPA 1967). Thus, the Examiner properly relied on Valenti ’665 to establish that the rejected claims would have been obvious based on the claims of the patent and the disclosure of Valenti ’665. The Examiner also correctly distinguishes between art that does not qualify or is not being used as prior art (e.g., Torres ’146) and art that does qualify and is being used as prior art (e.g., Valenti ’665 and Kluger). *See id.* at 600. Such distinction is particularly proper given the fundamental underpinning of the obviousness-type double patenting doctrine that the

public should . . . be able to act on the assumption that upon the *expiration* of the patent it will be free to use not only the invention claimed in the patent but also modifications or variants which would have been *obvious* to those of ordinary skill in the art at the time the invention was made, taking into account the skill of the art and prior art other than the invention claimed in the issued patent.

In re Longi, 759 F.2d 887, 892–93 (Fed. Cir. 1985) (quoting *In re Zickendraht*, 319 F.2d 225, 232 (CCPA 1963) (Rich, J., concurring)).

Accordingly, we sustain the Examiner’s obviousness-type double patenting rejection, based on claims 1–12 of Torres ’146 in view of Valenti ’665 and Kluger, of claim 1, and claims 5–8, 10, 14, and 16, which Appellant does not argue separately with respect to this rejection. Appeal Br. 6–8.

Appellant makes similarly unpersuasive arguments with respect to the Examiner’s obviousness-type double patenting rejections of claims 1, 5–8,

10, 14, and 16, based on (1) claims 1 and 2 of Valenti '222, claims 1–9 of Valenti '100, claims 1–12 of Valenti '282, claims 1–19 of Miracle '865, or claims 9–16 of Miracle '651 (2) in view of Valenti '665 and Kluger. Appeal Br. 12–16. Therefore, we also sustain these rejections.

Appellant makes similarly unpersuasive arguments with respect to the Examiner's obviousness-type double patenting rejections of claims 1, 5–8, 10, 14, and 16, based on (1) claims 1–7 of Miracle '508, claims 1–10 of Miracle '098, or claims 1–19 of Miracle '507 (2) in view of Valenti '665 and Kluger. Appeal Br. 8–9 and 16–18. These rejections are discussed below in further detail with respect to additional arguments Appellant makes.

Obviousness-Type Double Patenting

Claims 1–7 of Miracle '508, Valenti '665, and Kluger
Claims 1–10 of Miracle '098, Valenti '665, and Kluger
Claims 1–19 of Miracle '507, Valenti '665, and Kluger

With respect the Examiner's obviousness-type double patenting rejection of claim 1, based on claims 1–7 of Miracle '508 in view of Valenti '665 and Kluger, Appellant further argues “[t]he claims of the present application cannot extend the term of protection for the invention of [Miracle '508] as the present application and [Miracle '508] have the same priority date.” Appeal Br. 8. Appellant's argument is unpersuasive because even when patents issued for two co-pending applications would *potentially* have the same patent term, double patenting rejections (including obviousness-type double patenting rejections) are still valid and appropriate for at least two reasons.

One reason is the terms of the patents may ultimately differ because of patent term adjustments. MPEP § 804.02.VI. Another reason is that terminal disclaimers used to overcome nonstatutory double patenting rejections

include requirements that “serve to avoid the potential for harassment of an accused infringer by multiple parties with patents covering the same patentable invention.” *Id.* (citing *In re Van Ornum*, 686 F.2d 937, 944–48 (CCPA 1982)).

Accordingly, we sustain the Examiner’s obviousness-type double patenting rejection—based on claims 1–7 of Miracle ’508 in view of Valenti ’665 and Kluger—of claim 1, and claims 5–8, 10, 14, and 16, which Appellant does not argue separately with respect to this rejection. Appeal Br. 8–9.

Appellant makes similarly unpersuasive arguments with respect to the Examiner’s obviousness-type double patenting rejections of claims 1, 5–8, 10, 14, and 16, based on (1) claims 1–10 of Miracle ’098 or claims 1–19 of Miracle ’507 (2) in view of Valenti ’665 and Kluger. Appeal Br. 16–18. Therefore, we also sustain these rejections.

CONCLUSION

Claims Rejected	35 U.S.C. §	References/Basis	Affirmed	Reversed
1, 5–8, 10, 14, 16	103	Valenti '665, Kluger	1, 5–8, 10, 14, 16	
1, 5–8, 10, 14, 16	103	Miracle '398, Valenti '665, Kluger,	1, 5–8, 10, 14, 16	
1, 5–8, 10, 14, 16		Torres '146, Valenti '665, Kluger, Obviousness-Type Double Patenting	1, 5–8, 10, 14, 16	
1, 5–8, 10, 14, 16		Miracle '508, Valenti '665, Kluger, Obviousness-Type Double Patenting	1, 5–8, 10, 14, 16	
1, 5–8, 10, 14, 16		Miracle '865, Valenti '665, Kluger, Obviousness-Type Double Patenting	1, 5–8, 10, 14, 16	
1, 5–8, 10, 14, 16		Miracle '651, Valenti '665, Kluger, Obviousness-Type Double Patenting	1, 5–8, 10, 14, 16	
1, 5–8, 10, 14, 16		Valenti '222, Valenti '665, Kluger, Obviousness-Type Double Patenting	1, 5–8, 10, 14, 16	
1, 5–8, 10, 14, 16		Valenti '100, Valenti '665, Kluger, Obviousness-Type Double Patenting	1, 5–8, 10, 14, 16	
1, 5–8, 10, 14, 16		Valenti '282, Valenti '665, Kluger, Obviousness-Type Double Patenting	1, 5–8, 10, 14, 16	

Claims Rejected	35 U.S.C. §	References/Basis	Affirmed	Reversed
1, 5–8, 10, 14, 16		Miracle '098, Valenti '665, Kluger, Obviousness-Type Double Patenting	1, 5–8, 10, 14, 16	
1, 5–8, 10, 14, 16		Miracle '507, Valenti '665, Kluger, Obviousness-Type Double Patenting	1, 5–8, 10, 14, 16	
Overall Outcome			1, 5–8, 10, 14, 16	

TIME PERIOD FOR RESPONSE

No time period for taking subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a). *See* 37 C.F.R. § 1.136(a)(1)(iv).

AFFIRMED