

United States District Court  
Northern District of California

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UNITED STATES DISTRICT COURT  
NORTHERN DISTRICT OF CALIFORNIA

PLEXXIKON INC.,  
  
Plaintiff,  
  
vs.  
  
NOVARTIS PHARMACEUTICALS  
CORPORATION,  
  
Defendant.

Case No. 4:17-cv-04405-HSG

**ORDER GRANTING PLEXXIKON  
INC.'S MOTION FOR SUMMARY  
JUDGMENT OF NO ANTICIPATION**

Re: Dkt. No. 167

Pending before the Court is Plaintiff Plexxikon Inc.'s motion for summary judgment that the asserted claims of U.S. Patent Nos. 9,469,640 (the "'640 Patent") and 9,844,539 (the "'539 Patent") are not anticipated under 35 U.S.C. § 102 by U.S. Patent No. 4,595,780 ("Shionogi") and PCT Patent Publication No. WO 06/124874 (the "Kalypsys Application"). Dkt. No. 167. The Court heard argument on the motion, Dkt. No. 341, and **GRANTS** it for the reasons detailed below.

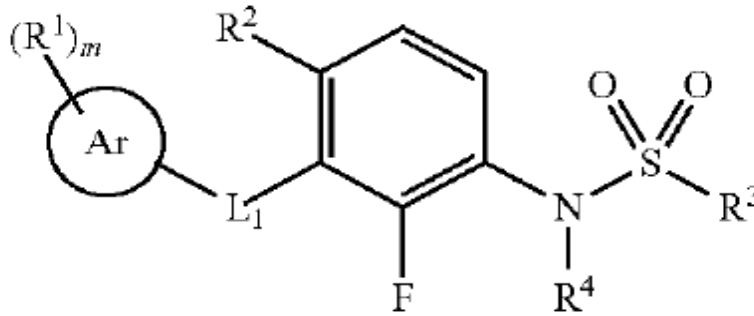
**I. BACKGROUND**

Plexxikon Inc. ("Plexxikon") accuses Defendant Novartis Pharmaceutical Corporation ("Novartis") of infringing claims 1, 2, 4-6, 9, and 11-12 of the '640 Patent and claims 1, 2, 4-9, 11-12, and 14-19 of the '539 Patent. Novartis responds, *inter alia*, that some or all of these claims are invalid as anticipated by Shionogi and the Kalypsys Application.<sup>1</sup> The parties do not dispute that Shionogi, which issued on June 17, 1986, and the Kalypsys application, which was filed on May 11, 2006, predate the applications of the asserted patents by more than one year, making them prior art under 35 U.S.C. § 102(b) (pre-AIA).

<sup>1</sup>Specifically, Novartis argues that the Kalypsys Application anticipates all claims, while Shionogi anticipates claims 1, 2, and 9 of the '640 Patent and claims 1, 2, and 7-9 of the '539 Patent.

1           **A.     The Asserted Claims**

2           The '640 and '539 Patents both claim a class of compounds defined by the following  
3 molecular structure:



10           As shown above,<sup>2</sup> the claimed structure has *variable* and *constant* components. The  
11 constant components, marked by O, S, N, and F, represent the elements oxygen, sulfur, nitrogen,  
12 and fluorine. In addition, the hexagon in the middle represents a phenyl ring, and the lines joined  
13 without an element represent carbons. The remaining elements of R<sup>1</sup>, R<sup>2</sup>, R<sup>3</sup>, R<sup>4</sup>, L<sup>1</sup>, Ar, and m  
14 are variables. See *generally* Dkt. Nos. 167-5, 167-6.

15           The parties agree that the claims require both elements and particular positions for those  
16 elements. For example, the fluorine must be in the “inner” or “2” position along the phenyl ring,  
17 between the nitrogen and the linker L1. Absent such positioning, the parties’ experts agree that a  
18 compound fails to satisfy the claims. See Dkt. No. 393-11 (“Baran Decl.”) ¶¶ 72, 93; 393-12  
19 (“Metzker Report”) ¶ 133.

20           Claim 1 of the '640 Patent, which the parties agree to treat as representative,<sup>3</sup> lists the  
21 following options for the claimed variables:

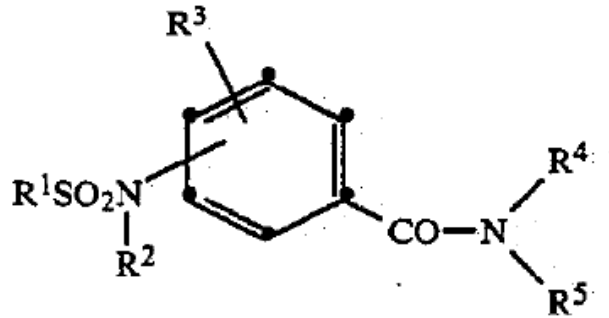
- 22
- L<sub>1</sub> is a bond or —N(H)C(O)—;
  - each R<sub>1</sub> is optionally substituted lower alkyl or optionally substituted heteroaryl;
  - R<sub>2</sub> is hydrogen or halogen;
  - R<sub>4</sub> is hydrogen;
  - R<sub>3</sub> is optionally substituted lower alkyl or optionally substituted aryl;
  - m is 0, 1, 2, 3, 4, or 5; and
  - Ar is a monocyclic heteroaryl containing 5 to 6 atoms where at least one atom is nitrogen.
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27 <sup>2</sup> See Dkt. No. 167-3 ('640 Patent) at claim 1; Dkt. No. 157-4 ('539 Patent) at claim 1.

28 <sup>3</sup> See Dkt. No. 167 (“MSJ”) at 2 n.3; Dkt. No. 186 (“Opp.”) at 4:25-27.

1           **B.     Shionogi**

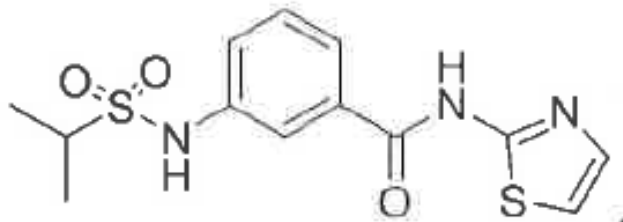
2           Like the asserted patents, Shionogi claims a broad class of compounds defined by a  
3 molecular formula.<sup>4</sup> See Dkt. No. 167-23 (Shionogi) at claim 1. Formula (I) has the following  
4 structure:



11 *Id.* at 1:25-36.

12           As in the asserted patents, the “R” groups are variables. For example, the R<sup>3</sup> element may  
13 be “hydrogen, halogen, a C<sub>1</sub>-C<sub>5</sub> alkyl, or C<sub>1</sub>-C<sub>5</sub> alkoxy group.” *Id.* at 1:37-45. The specification  
14 states that the halogen can be a fluorine. *Id.* at 2:28. By using a line going through the middle of  
15 the phenyl ring side, Shionogi indicates that R<sup>3</sup> may be located anywhere on the phenyl ring. See  
16 Baran Decl. ¶ 94.

17           Novartis’ expert, Dr. Phil Baran, does not expressly opine that Shionogi’s Formula (I)  
18 anticipates the asserted claims. Instead, Dr. Baran focuses on the examples provided in the  
19 specification. Among the 80 examples of specific compounds of Formula (I) in Shionogi, Dr.  
20 Baran focuses on Example 61, which corresponds to the following molecular structure:



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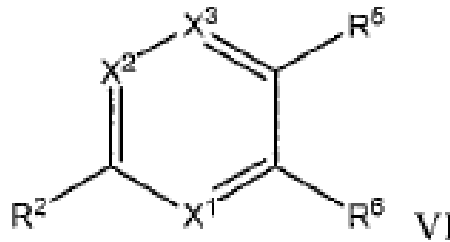
<sup>4</sup> Shionogi is directed to a different problem than the asserted patents—“sulfonamide benzamides” with “anti-viral” and “anti-coccidial activities,” rather than B-Raf inhibitors—a fact that is largely irrelevant to the anticipation analysis. See *State Contracting & Eng’g Corp. v. Condotte Am., Inc.*, 346 F.3d 1057, 1068 (Fed. Cir. 2003).

1 Shionogi at col. 19; Baran Decl. ¶ 92; Dkt. No. 397-3 (“Baran Report”) ¶ 417.<sup>5</sup>

2 Dr. Baran opines that Example 61 meets every limitation of claim 1 with one exception: it  
3 does not include a fluorine in the “inner” position of the phenyl ring. Baran Decl. ¶ 93. However,  
4 Dr. Baran opines that because Example 61 is a species of Formula (I), and Formula (I) permits a  
5 fluorine R<sup>3</sup> group anywhere along the phenyl ring, a person of ordinary skill in the art would  
6 “immediately see” Example 61 with the required fluorine. *Id.* ¶¶ 94-95.

7 **C. Kalypsys Application**

8 The Kalypsys Application, which was considered during prosecution of the ’539 Patent,  
9 covers multiple formulas and hundreds of compounds. As relevant to this motion, the Kalypsys  
10 Application sought to patent as claim 6 a compound having the formula shown below:



18 Dkt. No. 167-24 (Kalypsys Application) at 100.

19 Each of the elements in the above formula is a variable. *See id.* The variables appear to be  
20 nested, such that each X is selected from a group that includes an R, which itself may be one of a  
21 dozen elements. *Id.* As the result, the parties agree that claim 6 covers “trillions” of potential  
22 compounds. *See* Dkt. No. 397-1 (“Baran Depo.”) at 172:13-17.

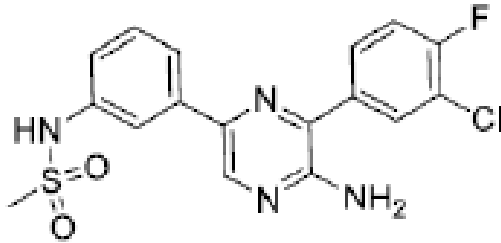
23 As with Shionogi, Dr. Baran does not expressly opine that the formula of claim 6  
24 anticipates the asserted claims. Instead, Dr. Baran focuses on Compound 132, which has the  
25 structure shown below. Even so, Dr. Baran expressly opines that Compound 132 “does not fall  
26 within the scope of the Asserted Claims.” Baran Decl. ¶ 72. Specifically, Dr. Baran identifies

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<sup>5</sup> The compound shown above appears to be a reconstruction of the molecule based on the table listing each variable selection in Shionogi. Notably, Shionogi appears to list hydrogen—not fluorine—for the R<sup>3</sup> variable. *See* Shionogi at cols. 19, 17.

1 three differences that prevent Compound 132 from anticipating the asserted claims, including that  
2 it (1) does not have a fluorine in the “inner” position of the phenyl ring, (2) has an NH<sub>2</sub> group in  
3 the location of R<sup>1</sup>, and (3) has a substituted phenyl in the position of R<sup>1</sup>. *Id.*



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8 *N*-(3-(5-amino-6-(3-chloro-4-fluorophenyl)pyrazin-2-  
9 yl)phenyl)methanesulfonamide

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11 *Id.* ¶ 131; *see* Kalypsys Application at 51.

12 Notwithstanding these admitted differences, Dr. Baran opines that claim 6 “discloses all of  
13 these modifications” required for Compound 132 to anticipate. Baran Decl. ¶ 131.

14 **II. LEGAL STANDARD**

15 A motion for summary judgment should be granted where there is no genuine issue of  
16 material fact and the movant is entitled to judgment as a matter of law. Fed. R. Civ. P. 56;  
17 *Anderson v. Liberty Lobby, Inc.*, 477 U.S. 242, 247–48 (1986). The purpose of summary  
18 judgment “is to isolate and dispose of factually unsupported claims or defenses.” *Celotex v.*  
19 *Catrett*, 477 U.S. 317, 323–24 (1986). The moving party has the initial burden of informing the  
20 Court of the basis for the motion and identifying those portions of the pleadings, depositions,  
21 answers to interrogatories, admissions, or affidavits which demonstrate the absence of a triable  
22 issue of material fact. *Id.* at 323.

23 If the moving party meets its initial burden, the burden shifts to the non-moving party to  
24 present facts showing a genuine issue of material fact for trial. Fed. R. Civ. P. 56; *Celotex*, 477  
25 U.S. at 324. The Court must view the evidence in the light most favorable to the nonmovant,  
26 drawing all reasonable inferences in its favor. *T.W. Elec. Serv., Inc. v. Pac. Elec. Contractors*  
27 *Ass’n*, 809 F.2d 626, 630–31 (9th Cir. 1987). Summary judgment is not appropriate if the  
28 nonmoving party presents evidence from which a reasonable jury could resolve the disputed issue

1 of material fact in the nonmovant’s favor. *Anderson*, 477 U.S. at 248. Nonetheless, “[w]here the  
2 record taken as a whole could not lead a rational trier of fact to find for the non-moving party,  
3 there is no genuine issue for trial.” *Matsushita Elec. Indus. Co. v. Zenith Radio*, 475 U.S. 574, 587  
4 (1986) (internal quotation mark omitted).

5 **III. DISCUSSION**

6 Plexxikon seeks summary judgment of no anticipation by Shionogi and the Kalypsus  
7 Application<sup>6</sup> on the grounds that (1) neither reference discloses a fluorine atom in the claimed  
8 position, and (2) the disclosed genera (formulas) cannot anticipate as a matter of law. In response,  
9 Novartis disavows any argument based on anticipation by the genera,<sup>7</sup> but argues that the species  
10 anticipate because a person of ordinary skill in the art could “at once envision” the species with  
11 the missing elements. Plexxikon counters that this is an obviousness, not anticipation, analysis.  
12 The parties further dispute the correct legal standard.

13 The Court first discusses the legal requirements for anticipation, then addresses each  
14 reference.

15 **A. Requirements for Anticipation**

16 An issued patent is invalid if “the invention was patented or described in a printed  
17 publication . . . more than one year prior to the date of application for patent in the United States.”  
18 *Net MoneyIN, Inc. v. VeriSign, Inc.*, 545 F.3d 1359, 1369 (Fed. Cir. 2008); *see* 35 U.S.C. § 102(b).  
19 Anticipation under section 102 “embodies the concept of novelty—if a device or process has been  
20 previously invented (and disclosed to the public), then it is not new, and therefore the claimed  
21 invention is ‘anticipated’ by the prior invention.” *Net MoneyIN*, 545 F.3d at 1369. By contrast,  
22 invalidity under section 103 occurs where the invention “is not identically disclosed” but “the  
23 differences between the claimed invention and the prior art are such that the claimed invention as a

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25 <sup>6</sup> Although Plexxikon styles its motion as one for summary judgment of no anticipation, Novartis  
26 asserts other anticipation grounds in this case, including in its own motion for summary judgment.  
Accordingly, this Order grants partial summary judgment only as to Shionogi’s and the Kalypsus  
Application’s anticipation.

27 <sup>7</sup> *See* Opp. at 16:15-16 (“Novartis has not argued that the claims are anticipated due to a prior  
28 disclosure of a genus.”), 18:27-28 (“Novartis’s argument is that the Kalypsus application discloses  
a specific, individual compound that anticipates the claims.”).

1 whole would have been obvious.” 35 U.S.C. § 103.

2 “Anticipation requires that a single prior art reference disclose each and every limitation of  
3 the claimed invention, either expressly or inherently.” *SRI Int’l Inc. v. Cisco Sys., Inc.*, 930 F.3d  
4 1295, 1306 (Fed. Cir. 2019). In addition to disclosing each element, the prior art must “disclose  
5 those elements ‘arranged as in the claim.’” *Net MoneyIN*, 545 F.3d at 1369 (quoting *Connell v.*  
6 *Sears, Roebuck & Co.*, 722 F.2d 1542, 1548 (Fed. Cir. 1983)). Where the patent claims a “genus,”  
7 the disclosure of a single species falling within that genus anticipates. *Eli Lilly & Co. v. Barr*  
8 *Labs., Inc.*, 251 F.3d 955, 971 (Fed. Cir. 2001); see *Fresenius USA, Inc. v. Baxter Int’l, Inc.*, 582  
9 F.3d 1288, 1298 (Fed. Cir. 2009) (Markush claims). But the reverse is not true: the disclosure of  
10 a genus “is not necessarily a disclosure of every species that is a member of that genus.” *Atofina*  
11 *v. Great Lakes Chem. Corp.*, 441 F.3d 991, 999 (Fed. Cir. 2006). Accordingly, the disclosure of a  
12 genus does not anticipate unless that genus is “so limited that a person of ordinary skill in the art  
13 can ‘at once envisage each member of this limited class.’” *In re Gleave*, 560 F.3d 1331, 1338  
14 (Fed. Cir. 2009) (citation omitted).

15 Relevant here is the distinction between a “combination” of elements and “multiple,  
16 distinct teachings.” See *Microsoft Corp. v. Biscotti, Inc.*, 878 F.3d 1052, 1069 (Fed. Cir. 2017).  
17 As noted above, anticipation requires elements to be “arranged as in the claim.” *Net MoneyIN*,  
18 545 F.3d at 1369. Where a prior art reference discloses multiple embodiments, it is improper to  
19 treat them as a “catalogue of parts” to be rearranged at will. See *id.* at 1370 (citing cases). Thus,  
20 in *Net MoneyIN*, the court rejected anticipation by a prior art reference that taught “two separate  
21 protocols” where the district court combined parts of both protocols to arrive at the claims. *Id.* at  
22 1371. Although the differences between each protocol and the claimed invention were “slight,”  
23 even small differences “invoke the question of obviousness, not anticipation.” *Id.*; see *Microsoft*,  
24 878 F.3d at 1069 (“[A]nticipation is not proven by ‘multiple, distinct teachings that the artisan  
25 might somehow combine to achieve the claimed invention.’”); *In re Arkley*, 455 F.2d 586, 587  
26 (C.C.P.A. 1972) (anticipation requires disclosure of a compound “without *any* need for picking,  
27 choosing, and combining various disclosures not directly related to each other” (emphasis in  
28 original)).

1           At the same time, where a prior art reference “teaches that the disclosed components or  
2 functionalities may be combined” and “one of skill in the art would be able to implement the  
3 combination,” the arrangement need not be express to anticipate. *Blue Calypso, LLC v. Groupon,*  
4 *Inc.*, 815 F.3d 1331, 1344 (Fed. Cir. 2016). For example, in *Blue Calypso*, the prior art disclosed  
5 numerous “tools” for an email communication system, including a “campaign” tool for targeted  
6 marketing and a “refer a friend” tool that provided discounts for referrals. *Id.* at 1341. The court  
7 found anticipation based on using those tools together because the reference disclosed a “limited  
8 number of tools” and expressly discussed combining them, such that a person of ordinary skill in  
9 the art could “at once envision” the combination. *Id.* at 1343-44.

10           Similarly, in *Kennametal, Inc. v. Ingersoll Cutting Tool Co.*, the prior art reference  
11 disclosed a cutting tool made by assembly of different materials, including five potential materials  
12 for the binder and three possible materials for the coating. 780 F.3d 1376, 1382 (Fed. Cir. 2015).  
13 The court affirmed the district court’s finding of anticipation because the reference expressly  
14 contemplated using the materials together and “the number of categories and components” was not  
15 “so large that the combination . . . would not be immediately apparent to one of ordinary skill in  
16 the art.” *Id.* at 1382-83 (quoting *Wm. Wrigley Jr. Co. v. Cadbury Adams USA LLC*, 683 F.3d  
17 1356, 1361 (Fed. Cir. 2012)).

18           Thus, a reference may implicitly disclose a combination if it is “sufficiently clear in  
19 disclosing the combinability of those elements such that a skilled artisan would ‘at once envision’  
20 the claimed combination.” *Chamberlain Grp., Inc. v. Techtronic Indus. Co.*, 935 F.3d 1341, 1350  
21 (Fed. Cir. 2019). But even where the reference teaches “combinability,” the number of possible  
22 categories must not be “so large that the combination . . . would not be immediately apparent to  
23 one of ordinary skill in the art.” *Nidec Motor Corp. v. Zhongshan Broad Ocean Motor Co. Ltd.*,  
24 851 F.3d 1270, 1274 (Fed. Cir. 2017) (quoting *Kennametal*, 780 F.3d at 1382). This standard,  
25 which derives from *In re Petering*, 301 F.2d 676, 681 (1962), may be the same for anticipation by  
26 a combination as for anticipation by a genus. *See Kennametal*, 780 F.3d at 1381 (citing *Petering*  
27 for anticipation by a combination); *Eli Lilly*, 471 F.3d at 1376 (citing *Petering* for anticipation by  
28



1 a genus). *But see Wrigley*, 683 F.3d at 1361 (stating that the two tests are different).<sup>8</sup>

2 “[A]nticipation is a question of fact.” *Eli Lilly*, 471 F.3d at 1375. Because a patent is  
3 presumed valid, the party asserting invalidity has the burden of proof to show anticipation by clear  
4 and convincing evidence. *Core Wireless Licensing S.A.R.L. v. LG Elecs., Inc.*, 880 F.3d 1356,  
5 1364 (Fed. Cir. 2018). Summary judgment of no anticipation may be appropriate when there is no  
6 genuine issue of material fact and “no reasonable jury could find [anticipation] by clear and  
7 convincing evidence.” *See Ctr. Admixture Pharmacy Servs., Inc. v. Adv. Cardiac Sols., P.C.*, 482  
8 F.3d 1347, 1358 (Fed. Cir. 2007).

9 **B. Shionogi**

10 As noted above, Novartis does not argue that the “genus” of Formula (I) of Shionogi  
11 anticipates the asserted claims. Nor can it. Formula (I) of Shionogi has five different variables,  
12 with two to four different options for each one, which creates, at minimum, hundreds of potential  
13 combinations. Novartis cannot show that such a broad formula discloses a “definite and limited  
14 class” sufficient for a person of ordinary skill in the art to “at once envisage every member.” *Eli*  
15 *Lilly*, 471 F.3d at 1376; *see Impax Labs., Inc. v. Aventis Pharms. Inc.*, 468 F.3d 1366, 1383 (Fed.  
16 Cir. 2006) (rejecting anticipation by a formula that covers hundreds of compounds). Thus, there is  
17 no genuine dispute that Formula (I) does not anticipate the asserted claims.

18 Nor is there a genuine dispute that Example 61 does not anticipate the asserted claims.  
19 Novartis admits that Example 61 “is missing one single atom that would place it squarely within  
20 the scope of [the asserted] claims.” *Opp.* at 13:26-28. Novartis’ expert, Dr. Baran, confirms that  
21 Example 61 meets the limitations of the asserted claims “with [the] exception” of the missing  
22 fluorine. *Baran Decl.* ¶ 93. That is insufficient as a matter of law to establish anticipation. *See*

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24 <sup>8</sup> In *Wrigley*, the Federal Circuit distinguished anticipation by a “genus,” which “turns on whether  
25 the genus was of such a defined and limited class” that a person of ordinary skill could “‘at once  
26 envision’ each member of the genus,” and anticipation by a combination, which turns on “whether  
27 the number of categories and components” is “so large that the combination . . . would not be  
28 immediately apparent to one of ordinary skill in the art.” 683 F.3d at 1361. The Court is unsure  
of the scope of any substantive difference between these tests, especially in light of more recent  
case law focusing on the “clarity” with which the reference discloses “combinability,” *see*  
*Chamberlain*, 936 F.3d at 1350, and on whether a person of ordinary skill would be able to  
implement the combination. *See Blue Calypso*, 815 F.3d at 1344.

1 *SRI*, 930 F.3d at 1306 (anticipation requires disclosure of “each and every limitation”); *see also*  
2 *Nidec*, 851 F.3d at 1275 (the “at once envision” test does not permit adding missing limitations).  
3 Accordingly, there is no genuine dispute that Example 61 does not anticipate the asserted claims.

4 The only potentially material dispute, then, lies in anticipation by the combination of  
5 Example 61 and the fluorine of Formula (I).<sup>9</sup> As explained above, the resolution of this question  
6 depends on whether these are “distinct teachings,” as in *Net MoneyIN*, or whether Shionogi  
7 teaches the “combinability” of the missing element with “sufficient clarity” and the number of  
8 components is not “so large” that the combination would not be “immediately apparent,” as in  
9 *Kennametal* and *Blue Calypso*.

10 The Court finds that *Net MoneyIN* presents the far apter case. As in *Net MoneyIN*,  
11 Example 61 provides a complete and distinct embodiment of the invention. Although Formula (I)  
12 covers Example 61, each of its alternatives is a distinct species of the invention. Put another way,  
13 Shionogi nowhere describes combining several alternative elements in a single compound, which  
14 makes each alternative “distinct” from every other. Thus, as in *Net MoneyIN*, Novartis combines  
15 subparts of different embodiments to arrive at the claimed invention. And as in *Net MoneyIN*,  
16 Novartis argues that anticipation should be found because the differences with the claims are only  
17 slight. The case is also similar to *Arkley*, where a party attempted to combine two compounds that  
18 were “exact precursors” to a claimed compound with reactants disclosed elsewhere in the prior art  
19 reference. 59 C.C.P.A. at 808. The predecessor court of the Federal Circuit rejected the attempt  
20 because nothing in the reference itself taught the selection of those precursors and reactants. *Id.*

21 By contrast, the cases related to implicit disclosure of a combination do not apply.  
22 Novartis argues that a person of ordinary skill in the art would “at once envision” Example 61  
23 with the missing fluorine because Formula (I) “provides a finite number of limited alternatives.”  
24 *Opp.* at 14:11-14. Specifically, Formula (I) states that the R<sup>3</sup> element may be a halogen (including  
25 a fluorine) located anywhere on the phenyl ring. *Baran Decl.* ¶ 94. But Example 61 already has

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27 <sup>9</sup> Formula (I) does not directly disclose a fluorine; it discloses a halogen, which *could* be a  
28 fluorine. Formula (I) also does not disclose the fluorine in the correct position, but instead  
describes several different possible positions. In any event, even if Formula (I) expressly  
disclosed the missing fluorine, Novartis’ anticipation argument would still fail.

1 an R<sup>3</sup> element—a hydrogen. *See* Shionogi at col. 17. Thus, the only way to arrive at the claimed  
 2 invention would be to (1) add a second R<sup>3</sup> element to a species that already has one, or (2)  
 3 substitute the preferred R<sup>3</sup> for the one found in Example 61.

4 The first option is precluded because Shionogi nowhere teaches adding an additional R<sup>3</sup>  
 5 element to a species of Formula (I) that already has one. *See Blue Calypso*, 815 F.3d at 1344  
 6 (requiring a reference to “teach[] that the disclosed components . . . may be combined”);  
 7 *Chamberlain*, 935 F.3d at 1350 (requiring a “sufficiently clear” teaching of “combinability”). The  
 8 second option is precluded because modification of prior art is the province of obviousness, not  
 9 anticipation. *See Net MoneyIN*, 545 F.3d at 1371 (“[D]ifferences between the prior art reference  
 10 and a claimed invention, however slight, invoke the question of obviousness, not anticipation.”);  
 11 *Enplas Display Device Corp. v. Seoul Semiconductor Co., Ltd.*, 909 F.3d 398, 405 (Fed. Cir.  
 12 2018) (“Prior art that must be modified to meet the disputed claim limitation does not anticipate  
 13 the claim.”). And even if a person of ordinary skill in the art sought to modify Example 61, Dr.  
 14 Baran admits that there are “perhaps hundreds” of possible modifications to R<sup>3</sup> based on Formula  
 15 (I), which makes the number of possible elements overly large. Baran Depo. at 99: 24-100:11.  
 16 Accordingly, Shionogi does not disclose the combination of Example 61 and the fluorine of  
 17 Formula (I) and thus does not disclose the elements “arranged as in the claim.”

18 Novartis relies on *Kennametal* and *Petering* to argue otherwise, but those cases only  
 19 underscore the differences with this one. In *Kennametal*, the court relied on the equivalent of a  
 20 formula to find that the prior art reference contemplated using five metals with three coating  
 21 methods. 780 F.3d at 1382. It did *not* rely on the examples. *See id.* And the court ultimately  
 22 found anticipation because the reference “effectively” taught fifteen combinations, one of which  
 23 anticipated the challenged claim, so the number of components was not so large as to prevent the  
 24 combination from being “immediately apparent.” *Id.* at 1383; *see also Nidec*, 851 F.3d at 1274.<sup>10</sup>  
 25 Here, by contrast, Novartis disavows any reliance on the generic Formula (I) and does not dispute

26 \_\_\_\_\_  
 27 <sup>10</sup> Novartis argues that *Kennametal* involved “over 10,000 options.” Opp. at 14 n.5. However,  
 28 there were only fifteen “effective” ones because the other options involved multiple coatings,  
 many of which fell within the scope of the claim. *Kennametal*, 780 F.3d at 1382-83; *see also*  
*Nidec*, 851 F.3d at 1274 (confirming fifteen “effective” options in *Kennametal*).

1 that it teaches a large number of combinations.

2 Similarly, in *Petering*, the Federal Circuit’s predecessor court held that a genus that  
3 disclosed a “limited class” of 20 compounds rendered unpatentable a patent that recited one of  
4 those 20. *See* 301 F.2d at 682. Although the court considered factors other than the size of the  
5 class, such as the “limited number of variations” for some elements, Novartis does not argue that  
6 any of these factors are relevant here. *See id.* at 681-82. And as that court later clarified, *Petering*  
7 does not support “the mechanistic dissection and recombination of the components of the specific  
8 illustrative compounds in every chemical reference” in order to “create hindsight anticipations  
9 with the guidance of a[] [patentee’s] disclosures, on the theory that such reconstructed disclosures  
10 describe specific compounds within the meaning of section 102.” *In re Ruschig*, 343 F.2d 965,  
11 974 (C.C.P.A. 1965).

12 In light of these principles, Dr. Baran’s testimony does not create a genuine dispute of fact  
13 as to anticipation. Dr. Baran opines that a known “halogen walk” or “halogen scan” technique  
14 would have provided a motivation to add fluorine atoms to the phenyl ring of Example 61. *See*  
15 Baran Decl. ¶¶ 104, 107. But that is an obviousness analysis, not an anticipation one. *See Bos.*  
16 *Scientific Scimed, Inc. v. Cordis Corp.*, 554 F.3d 982, 991 (Fed. Cir. 2009) (finding obviousness,  
17 not anticipation, where “two separate embodiments” of a reference taught all limitations and “one  
18 of ordinary in the art would be motivated to combine” them). As the Federal Circuit has  
19 explained, *Kennametal* and its progeny simply do not stand for the proposition that a reference  
20 anticipates if “a skilled artisan viewing the reference would ‘at once envisage’ [a] missing  
21 limitation.” *Nidex*, 851 F.3d at 1274. Rather, the “relevant question” is whether “the number of  
22 categories and components disclosed in the prior art reference is so large that the combination . . .  
23 would not be immediately apparent to one of ordinary skill in the art.” *Id.* (quoting *Kennametal*,  
24 78 F.3d at 1382). Because Dr. Baran does not opine on the size of the categories, he fails to  
25 consider the legally-relevant factor, and his opinion does not create a genuine dispute of material  
26 fact. *Cf.* Baran Depo. at 172:13-17 (applying an incorrect legal test to find anticipation in the  
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28

1 absence of teaching of one of the limitations).<sup>11</sup>

2 Accordingly, the Court grants summary judgment of no anticipation by Shionogi.

3 **C. Kalypsys Application**

4 The case for the Kalypsys Application is even weaker than the argument based on  
5 Shionogi. For the Kalypsys Application, Dr. Baran abandons all pretense of a “combination” and  
6 describes the analysis as what it is: modification. *See* Baran Decl. ¶¶ 72-73 (agreeing that  
7 Compound 132 “does not fall within the scope of the Asserted Claims” but stating that “the  
8 Kalypsys application discloses all three [required] modifications” in claim 6). As Novartis itself  
9 acknowledges in its brief, “concepts of direction, motivation, and modification are irrelevant to  
10 whether a reference is anticipatory or not.” *Opp.* at 19:12-13; *accord Enplas*, 909 F.3d at 405  
11 (Fed. Cir. 2018) (“Prior art that must be modified to meet the disputed claim limitation does not  
12 anticipate the claim.”); *In re Chudik*, 851 F.3d 1365, 1374 (Fed. Cir. 2017) (“Prior art that ‘must  
13 be distorted from its obvious design’ does not anticipate the invention.” (citation omitted)).

14 Novartis also argues that a person of ordinary skill in the art would “at once envision” a  
15 “simplification” to Compound 132 because doing so would have several advantages. *See* Baran  
16 Decl. ¶¶ 85-87. Again, that is a motivation to combine analysis, not an anticipation one. As  
17 explained above, the “at once envisage” test “does not permit . . . fill[ing] in missing limitations  
18 simply because a skilled artisan would immediately envision them.” *Nidec*, 851 F.3d at 1274-75.  
19 The inquiry is limited solely to “whether the disclosure of a limited number of combination  
20 possibilities discloses one of the possible combinations.” *Id.* Accordingly, Dr. Baran’s opinion  
21 does not create a material dispute because he does not consider the number of possible  
22 combinations or the size of the resulting class.

23 The Court therefore grants summary judgment of no anticipation by Shionogi.

24 //

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27 <sup>11</sup> Ultimately, the Court agrees with Plexxikon that Novartis’ theory is an end-run around the  
28 requirements for anticipation by a genus. Because Novartis cannot show that the number of  
combinations when considering the reference *as a whole* is “not so large” as to prevent a skilled  
artisan from envisioning a particular combination, Example 61 adds nothing to the analysis.

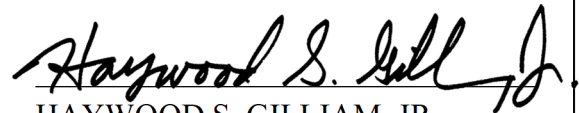
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**IV. CONCLUSION**

For the foregoing reasons, the Court **GRANTS** Plexxikon’s motion for summary judgment of no anticipation by Shionogi or the Kalypsys Application.

**IT IS SO ORDERED.**

Dated: February 23, 2021

  
HAYWOOD S. GILLIAM, JR.  
United States District Judge