IN THE UNITED STATES DISTRICT COURT FOR THE DISTRICT OF DELAWARE

DOW CHEMICAL CANADA INC., on its behalf and as assignee of THE DOW CHEMICAL COMPANY,	: : :	
Plaintiff,	:	
v .	:	
HRD CORPORATION (d/b/a Marcus Oil & Chemical),	• : :	C.A. 05-023-RGA
Defendant/Counterclaim Plaintiff,	:	
v .	:	
DOW CHEMICAL CANADA INC., on its	:	
own behalf and as assignee of THE DOW CHEMICAL COMPANY, and the	:	
DOW CHEMICAL COMPANY,	:	
Counterclaim Defendants.	:	

MEMORANDUM OPINION

Kenneth J. Nachbar, Esq., Wilmington, Delaware; Harry J. Roper (argued), Esq. Chicago, Illinois; Aaron A. Barlow (argued), Esq., Chicago, Illinois; Attorneys for Plaintiff Dow Chemical Canada Inc. and Counterclaim Defendants Dow Chemical Canada Inc. and The Dow Chemical Company.

John A. Sensing, Esq., Wilmington, Delaware; William C. Ferebee (argued), Esq., Houston, Texas; Attorneys for Defendant and Counterclaim Plaintiff HRD Corporation (d/b/a Marcus Oil & Chemical).

November 5, 2012 Wilmington Delaware



This Opinion considers HRD's motion to reopen discovery. (D.I. 707).¹ HRD argues that discovery must be reopened so that it may fairly pursue its counterclaims for misappropriation of trade secrets and for contract claims on certain Dow patent filings. The deadline for completion of fact discovery was February 6, 2009. (D.I. 189). HRD argues that Dow failed to produce certain patents and patent applications responsive to HRD's request for "wax products to be used in [hot melt adhesives] or to one-pack, two-pack, or three-pack formulations for the [hot melt adhesives]." (D.I. 708, p. 4). Dow challenged this interrogatory as overbroad to the extent it was not limited to "products made from or containing Polyethylene wax" ("PE wax") as defined by the Joint Development Agreement ("JDA"). (D.I. 483, Exh. 1 ¶ 4.2). Subject to that objection, Dow produced 14 published patent applications that related to "low molecular weight polymers and refer to hot melt adhesive applications." HRD argues that in making this production, Dow's responses were predicated on an artificially narrow definition of "made from or containing a Polyethylene wax," and it thus omitted approximately 100 responsive applications. In furtherance of this position, HRD filed a Motion in Limine with the Special Master to argue that "made from or containing a Polyethylene Wax" should be afforded its plain and ordinary meaning, rather than Dow's allegedly artificially narrow technical definition derived from the JDA and Supply Agreement. (D.I. 715). The Special Master agreed with HRD and held that "products made from or containing Polyethylene Wax" should be accorded its plain and ordinary meaning. (D.I. 719). Dow filed an Exception to the Special Master's Ruling, arguing that a product should be said to contain a PE wax only if scientific

¹ The procedural and factual backgrounds of this case are well known to both the parties and this Court. There is no need for them to be reproduced at length here.

testing would show the presence of a PE wax compound, as defined by the parties in the JDA and Supply Agreement. (D.I. 727).

The Court will first resolve Dow's Exception to the Special Master's Ruling and decide what it means under the JDA and Supply Agreement for a product to be "made from or containing Polyethylene Wax." Under the JDA, Dow and HRD were to develop two kinds of products used in hot melt adhesives. These were PE wax products and a product called a twopack. The JDA and Supply Agreement awarded HRD ownership of certain intellectual property "Developments" that included "all products made from or containing Polyethylene Waxes." The scope of "made from or containing Polyethylene Waxes" is important to HRD's attempt to reopen discovery, as HRD argues that Dow's discovery responses to its request for relevant patent applications were predicated on an artificially narrow definition of this term. The consequence, HRD argues, is that Dow failed to produce approximately 100 discoverable applications to HRD, thus compromising HRD's efforts to establish its claims.

In support of its argument for a broader interpretation of the term, HRD argues that there are four scenarios that define "products made from or containing Polyethylene Waxes:" (1) the product is completely made from PE wax; (2) the product contains PE wax because a PE wax is physically added to the product; (3) the product contains a PE wax because the PE wax is generated *in situ* during the chemical creation of the product; and (4) the product contains a PE wax, which is generated *in situ* in small amounts as a result of the chemical creation of a given polymer. (D.I. 751, pp. 5-6). HRD states that scientific testing may be used to detect whether a product is made from or contains a PE wax in the first three scenarios. In the fourth scenario, however, HRD does not rely on scientific methods. Rather, HRD argues that a product contains PE wax if Dow knew that the product would contain PE wax, resulting in a change or

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improvement in the product's properties. Dow agrees with HRD that the first three scenarios correctly describe a product made from or containing a PE wax. (D.I. 765, pp. 6-7). Dow objects, however, to the fourth scenario. Dow argues that a product only contains a PE wax if it can be shown, through scientific testing, to contain a compound meeting the requirements of a PE wax as defined by the JDA and the Supply Agreement. Dow argues that the testing must show that a compound within the product meets the PE wax production requirements of the JDA as described in this Court's previous summary judgment opinion: (1) it is a metallocene polymer or copolymer of ethylene that has (2) an average molecular weight ("M_n") of 600 to 9,000, (3) a density of greater than .890 g/cc and (4) a melting point ("T_m") above 50°C. (D.I. 433, pp. 18-21).² Dow argues that HRD's fourth scenario abandons any objective measure to determine whether a PE wax is used within a product and instead proposes an unreliable subjective test.

The Court agrees with Dow. HRD's fourth scenario for determining whether a product contains a PE wax makes no sense. It is hardly believable that two chemical companies would agree to define a chemical product according to what employees of one party subjectively knew. If the product contains a PE wax, it should be scientifically verifiable through testing. If a product does not contain a PE wax, it cannot be made to contain a PE wax by a Dow employee thinking it does. This makes the fourth category surplusage. For these reasons, the Court adopts Dow's interpretation of "products made from or containing Polyethylene Waxes." Dow's Exception to the Special Master's ruling is sustained.

HRD argues that even if the Court adopts Dow's definition of "products made from or containing Polyethylene Waxes," it can prove that Dow failed to comply with its discovery

² Dow further argues that it only must provide applications related to inventions that have been "actually reduced to practice," as the JDA so limits HRD's ownership interest in IP Developments under the JDA. (D.I. 483, ¶ 10.7). This detail, however, is not relevant in determining whether a product contains a PE wax.

obligations and therefore good cause exists for the Court to reopen discovery. Federal courts have broad discretion to manage discovery. *See Sempier v. Johnson & Higgins*, 45 F.3d 724, 734 (3d Cir. 1995). A party seeking to modify a Scheduling Order must show "good cause" for the change. Fed. R. Civ. P. 16(b)(4). To establish good cause, HRD must show that a more diligent pursuit of discovery was impossible. *Alexiou v. Moshos*, 2009 WL 2913960, *3 (E.D. Pa. 2009). In deciding whether to modify a scheduling order, the Court may consider any prejudice to the party opposing the modification. *Johnson v. Mammoth Recreations, Inc.*, 975 F.2d 604, 609 (9th Cir. 1992). Prejudice may include the delay of a trial date. *See Redhead v. U.S.*, 686 F.2d 178, 184 (3d Cir. 1982). The trial is set for January 2013. Any reopening of discovery would cause the trial date of this nearly eight-year old case to be lost.

HRD's argument hinges on Dow's response to "Interrogatory No. 4," submitted on January 23, 2009. (D.I. 709, Exh. 5 at 7). HRD argues that Dow failed to produce approximately 100 patent applications responsive to this discovery request. Interrogatory No. 4 follows:

Specify all patent applications or provisional filings made by Dow since January 2001, related to wax products to be used in [hot melt adhesives], or related to one-pack, two-pack or three-pack formulations for the [hot melt adhesive] industry, and uses thereof, including the current status of each application or provisional filing.

(*Id.*). Dow objected to this interrogatory to the extent that it asked for inventions outside the scope of the JDA and Supply Agreement, arguing that it only need to produce applications related to PE waxes. (*Id.* at 7-8). Subject to that objection, Dow identified 14 published patent applications that related to "low molecular weight polymers and refer to hot melt adhesive applications," adopting the limitations of the JDA and the Supply Agreement as its criteria for

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production. (Id. at 8).³ While discovery was open, HRD never challenged Dow's objection to the interrogatory or filed a motion to compel Dow to produce applications to the full extent of Interrogatory No. 4's literal scope. This leaves HRD in a poor position to now complain about Dow's response. As stated above, HRD must show that a more diligent pursuit of discovery was impossible in order to show good cause for reopening discovery. HRD argues it had no way of knowing that Dow assigned a "secret" definition to "containing PE waxes" and was thus failing to produce relevant patent applications. (D.I. 708, p. 9). Dow's objection, however, made it apparent that there was a difference of opinion as to Dow's obligations in response to Interrogatory No. 4. Further, there was nothing "secret" about Dow's criteria for production, as Dow explained it was limiting its response to inventions within the scope of the parties' agreements, predicated on an explicit definition of what it considered relevant applications. This put HRD on notice of Dow's criteria for production, and HRD never challenged that criteria. Had HRD addressed this issue while discovery was still open, the dispute could have been resolved in accordance with the Court's schedule. Instead, HRD now asks the Court to reopen discovery nearly eight years after the initial filing of Dow's complaint and less than three months before trial. The Court will not reopen discovery to require Dow to produce anything broader than the express limitations Dow outlined in its objection to Interrogatory No. 4.

That being said, HRD argues that Dow failed to comply with its own criteria for production. In support, HRD cites numerous patent applications that it discovered through its own investigation, arguing that they met Dow's criteria. HRD argues that it now must conduct further discovery in order to determine the applications' relevance to its claims. None of the applications HRD cites are demonstrative of Dow discovery failings, as they do not fall within

³ Dow used the definition of PE wax limited to metallocene polymer or copolymers of ethylene with the specified molecular weight, density, and melting point.

the scope of the JDA or Supply Agreement. For example, HRD argues that U.S. Patent App. Pub. No. 2010/0160497 ("'497 application") should have been produced. (D.I. 709, Exh. 11). Although the '497 application does disclose copolymers with molecular weights, melting points, and densities that overlap with polymers covered by the JDA, this is not the only requirement for an intellectual property "Development" to fall within the scope of the JDA as HRD's property. The JDA only provides HRD an interest in a "Development" that has been "actually reduced to practice." (D.I. 483, Exh. 1 at ¶ 10.7). HRD argues that the filing of the '497 patent application itself suffices to meet the reduction to practice requirement. The Federal Circuit, however, distinguishes between "actual reduction" and "constructive reduction" to practice. See Hyatt v. Boone, 146 F.3d 1348, 1352 (Fed. Cir. 1998). The filing of a patent application only constitutes constructive reduction to practice. See id. Actual reduction to practice requires the invention to be physically produced.⁴ Because the JDA only awards HRD an interest in an invention that is "actually" reduced to practice, the invention must have been actually produced for its corresponding application to be discoverable. Within its briefing in opposition to HRD's motion and at oral argument, Dow indicated that the '497 Patent was never actually reduced to practice. (D.I. 721, pp. 15-16; D.I. 774, pp. 47-48). The Court has no reason to doubt Dow's assertion. Because the '497 application was never actually reduced to practice, it was not within the scope of both the JDA and Supply Agreement and was thus outside of Dow's production obligations. Nothing here indicates Dow shirked its discovery obligations in relation to the '497 application, and its existence does not trigger good cause to reopen discovery.

⁴ In order to establish actual reduction to practice, the inventor must prove that he constructed an embodiment or performed a process that met all the limitations of the claim, and that he determined that the invention would work for its intended purpose. *Slip Track Sys., Inc. v. Metal-Lite, Inc.*, 304 F.3d 1256, 1265 (Fed. Cir. 2002).

HRD next cites U.S. Patent Application No. 2009/0054861 ("'861 application"). HRD argues that this application discloses a "two-pack" component to make a hot melt adhesive. Because a "two pack" is a product derived from a PE wax, any related inventions would be a "Development" owned by HRD according to the agreement. Hot melt adhesives are typically composed of three products; a polymer, a wax, and a tackifer. (D.I. 444, p. 3). A "two-pack" product is an invention that takes the place of the polymer and the wax in the hot melt adhesive. (*Id.*). A hot melt adhesive formed with a two-pack would thus be composed of the two-pack component and a tackifer. The '861 application, however, fails to disclose a tackifer. There is thus no indication that the '861 application is related to a hot melt adhesive product and it therefore does not supply good cause to reopen discovery.

HRD next cites U.S. Patent Application No. 2011/0118416 ("'416 application"). HRD argues that this application discloses a PE wax product. Dow argues that nothing in the application demonstrates a disclosed polymer with a density value above .89 g/cc. HRD counters that the argument that a physical property of a polymer is unstated does not mean that it does not exist for the polymer, nor does it negate the existence of the polymer. HRD fails to consider that Dow's discovery objection only obligated Dow to produce applications that disclose PE waxes precisely meeting every requirement of the JDA and Supply Agreement. HRD cites an expert report (D.I. 736) to insist that notwithstanding the application's failure to explicitly disclose a density value, it can be derived from other stated physical properties of the application. This expert report, however, was submitted with HRD's Reply Brief. That is too late. Dow did not have an opportunity to respond to its content. ⁵ If HRD desired the Court to consider the expert report, it should have been submitted with HRD's opening brief to provide

⁵ The expert report is 28 pages long, attached with 38 exhibits comprising 5 volumes of material.

Dow with an opportunity to respond. This would have allowed the issue to be fully vetted. HRD's failure to do so prohibits the Court from crediting its position. Because there is no indication that the '416 application meets Dow's criteria for production, its existence does not provide good cause to reopen discovery.

HRD next cites U.S. Patent Application No. US2012/0108777 ("777 application"), again arguing it was a Dow application that should have been produced. The '777 application is a grandchild continuation of U.S. Patent Application No. 10/567142, which was published under U.S. Pub. No. 2006/0287444 ("'444 application"). This Court held in its Summary Judgment opinion that the '444 application was directed to areas of invention allocated to Dow under the agreement, as it only claimed polymers and not products. (D.I. 248, p. 38-39). Dow's failure to produce the '777 application is thus not a discovery violation and does not suggest that discovery should be reopened.

HRD further referenced a series of patent filings within its brief opposing Dow's Exception to the Discovery Master's Ruling. (D.I. 751, pp. 10-13). HRD argues that Dow's failure to produce these applications further supports its motion to reopen discovery. Like the previous set of applications, however, none of these provide good cause. The first application is PCT Application No. WO 2005/090427. The face of this application shows that it shares a disclosure with U.S. Application No. PCT/US2005/008917. This Court previously granted summary judgment on this application in Dow's favor. (D.I. 433, pp. at 50-51).⁶ Further, the Special Master and this Court have previously denied HRD's request for discovery on a set of patent applications that included this application. (507, p. 2 at ¶1; Exh. A to D.I. 507 at item 41).

⁶ The Court's summary judgment opinion used the WIPO patent application number (WO/2005/090425), but HRD'S April 2009 expert report from Greg Borsinger included both application numbers together, "PCT/US2005/08917; (WIPO Patent Application WO/2005/090425)," making clear these application numbers relate to the same invention. (D.I. 264, Exh. 34 at 6).

Thus, this application does not provide HRD with good cause to reopen discovery. HRD then cites U.S. Patent No. 7,897,689, but this patent was likewise disposed of on summary judgment when it was identified as U.S. Patent Pub. No. 2006/0199914 ("'914 application"). (D.I. 433, pp. 51-52). The '914 application was also subject to a previous discovery request that was denied by the Special Master and this Court. (D.I. 546; D.I. 507 at ¶1). HRD then cites U.S. Patent No. 7,259,219, which again, was subject to the Court's summary judgment motion in Dow's favor. (D.I. 433, p. 48). The Court also has already denied discovery on this patent. (D.I. 546, D.I. 507, p. 2 at ¶1). HRD next cites U.S. Patent No. 8,034,878, which shows on its face it was a PCT application with the number WO2007/078697 and also that it was published as U.S. Patent Pub. No. 2008/0306217. Dow identified this application over three years ago within an interrogatory response. (D.I. 765, Exhibit D at 8). This Patent was further subject to the Court's Summary Judgment opinion. (D.I. 433 at 52-54). This Court has previously denied requests for further discovery on this application. (D.I. 546; 507).

These patent filings represent the remainder of HRD's argument. For the reasons discussed, HRD has not shown that Dow violated its discovery obligations. HRD has thus failed to establish good cause for the reopening of discovery. HRD's motion to reopen discovery is thus denied.

An appropriate order will follow.

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