# UNITED STATES BANKRUPTCY COURT EASTERN DISTRICT OF VIRGINIA Alexandria Division

In re:		)	
		)	
QIMONDA AG		)	Case No. 09-14766-SSM
		)	Chapter 15
	Debtor	)	-

#### **MEMORANDUM OPINION**

Before the court—on remand from the United States District Court—is the motion of Dr. Michael Jaffé, the foreign representative in this cross-border insolvency case, to modify the Supplemental Order to eliminate or restrict the applicability of § 365 of the Bankruptcy Code. The foreign debtor, Qimonda AG ("Qimonda"), is a German manufacturer of semiconductor memory devices, and the motion is opposed by seven licensees of the debtor's U.S. patents: Samsung Electronics Co., Ltd. ("Samsung"), Infineon Technologies AG ("Infineon"), Micron Technology, Inc. ("Micron"), Nanya Technology Corporation ("Nanya"), International Business Machines Corp. ("IBM"), Hynix Semiconductor, Inc. ("Hynix"), and Intel Corporation ("Intel"). The issues to be resolved are (a) whether the failure of German insolvency law to afford patent licensees the protections they would enjoy under § 365(n) of the Bankruptcy Code is "manifestly contrary" to the public policy of the United States; and (b) whether the licensees of the debtor's United States patents are "sufficiently protected" if they are not accorded those protections. An evidentiary hearing was held on March 1, 2, 3, and 4, 2011, and was continued to March 30, 2011 for final argument after the parties had submitted extensive proposed findings of fact and conclusions of law. For the reasons stated, the court concludes that public policy, as well as the

economic harm that would otherwise result to the licensees, requires that the protections of § 365(n) apply to Qimonda's U.S. patents.

### Background and Findings of Fact<sup>1</sup>

A.

Qimonda, which had its headquarters in Munich, Germany, was a manufacturer of semiconductor memory devices. It was formed in 2006 as a spin-off of the memory products division of another German company, Infineon, itself a 1999 spin-off of the semiconductor division of still a third German company, Siemens AG ("Siemens"). Qimonda filed an application in the Amtsgericht München - Insolvenzgericht ("Munich Insolvency Court") in Munich, Germany, on January 23, 2009, and Dr. Jaffé was appointed as the Insolvency Administrator on April 1, 2009. On June 15, 2009, Dr. Jaffé filed a petition in this court for recognition of the Qimonda proceedings under Chapter 15 of the Bankruptcy Code.<sup>2</sup> On July 22, 2009, Judge Mayer of this court entered an order (Doc. # 56) recognizing the German insolvency proceedings as the foreign main proceeding and a Supplemental Order (Doc. # 57), which, among other provisions, made § 365 of the Bankruptcy Code "applicable in this proceeding."

Qimonda's assets include approximately 10,000 patents, of which approximately 4,000

<sup>&</sup>lt;sup>1</sup> Because portions of the testimony and some of the exhibits related to information that had been designated "Highly Confidential – Attorneys' Eyes Only" under a protective order that was entered following the remand, the court proceedings were closed whenever such matters were being presented. To avoid the necessity of a secret annex to this opinion, the findings related to such matters are presented only in the aggregate without identifying specific parties by name or the details of specific transactions.

<sup>&</sup>lt;sup>2</sup> Two U.S. subsidiaries of Qimonda had filed voluntary chapter 11 cases several months earlier in the District of Delaware. *In re Qimonda Richmond, LLC*, Case No. 09-10589 (Bankr. D. Del., filed Feb. 20, 2009); *In re Qimonda North American Corp.*, Case No. 09-10590 (Bankr. D. Del., filed Feb. 20, 2009);

are U.S. patents. After receiving communications from two licensees of the patents—Samsung and Elpida Memory, Inc. ("Elpida")—asserting rights under § 365(n) of the Bankruptcy Code, Dr. Jaffé filed a motion to modify the Supplemental Order to remove the reference to § 365 altogether or to qualify it by inserting a proviso that § 365 would apply "only if the Foreign Representative rejects an executory contract pursuant to Section 365 (rather than simply exercising the rights granted to the Foreign Representative pursuant to the German Insolvency Code)." The motion was opposed by Samsung, Elpida, Infineon, Micron, and Nanya. By memorandum opinion and order of November 19, 2009, Judge Mayer determined that deference to German law was appropriate. *In re Qimonda AG*, 2009 WL 4060083 (Bankr. E.D. Va. 2009). An Amended Supplemental Order (Doc. # 180) was entered that same day that, while maintaining the general applicability of § 365, inserted, in a somewhat modified form,<sup>3</sup> the proviso requested by the Foreign Representative.

An appeal was taken by Samung, Infineon, Micron, Nanya, and Elpida to the United States District Court, which on July 2, 2010, affirmed in part but remanded to determine whether restricting the applicability of § 365(n) was "manifestly contrary to the public policy of the United States" and whether the licensees would be "sufficiently protected" if § 365(n) did not apply. *In re Qimonda AG Bankruptcy Litigation*, 433 B.R. 547 (E.D. Va. 2010). Following the

<sup>&</sup>lt;sup>3</sup> Specifically, the Amended Supplemental Order stated that the application of § 365 "shall not in any way limit or restrict (i) the right of the Administrator to elect performance or nonperformance of agreements under § 103 German Insolvency Code or such other applicable rule of law in the Foreign Proceeding, or (ii) the legal consequences of such election; provided, however, if upon a motion by the Administrator under Section 365 of the Bankruptcy Code, the court enters an Order providing for the assumption or rejection of an executory contract, then Section 365 shall apply without limitation solely with respect to the contracts subject to such motion."

remand, three additional licensees—IBM, Hynix, and Intel—were allowed to intervene.<sup>4</sup>

В.

The evidence at the remand hearing established that Qimonda's most valuable remaining assets are its patents, most of which are related to Dynamic Random Access Memory ("DRAM") technology, but some of which is related to flash memory and to semiconductor process technology. According to the testimony, most of Qimonda's patents are new or have a long remaining life (8 to 9 years on the average). Claims in the amount of approximately €4 billion—about one-fourth of them by U.S. creditors, including Qimonda's U.S. subsidiaries—have been filed in the German proceedings. Dr. Jaffé, the insolvency administrator, is a German attorney specializing in insolvency law. Over the past 15 years, he has been appointed as insolvency administrator in more than 500 cases and preliminary insolvency administrator in many more. As insolvency administrator, Dr. Jaffé serves as a fiduciary for the creditors and has responsibilities similar to that of a trustee under the U.S. Bankruptcy Code.

C.

As noted, Infineon is a German corporation that was spun out from Siemens in 1999. It was and remains Qimonda's majority shareholder. Infineon designs, manufactures, and markets semiconductors for use in automotive, industrial, and security industries. By its own account, it is either number one or two in the world in providing semiconductor chips to the automotive industry, first in providing power semiconductors, and first in producing chips for security cards

<sup>&</sup>lt;sup>4</sup> Judge Mayer recused himself following the remand because of a conflict involving one of the intervening licensees. After the evidentiary hearing was held, Elpida settled with the foreign representative and withdrew its opposition to the motion.

and passports. Its security chips are used in U.S. passports and its power chips in such iconic U.S. products as the iPhone and iPad. At the time Qimonda was spun off, Infineon and Qimonda entered into a Carve-Out and Contribution Agreement, under which Infineon transferred to Qimonda all the assets of its memory products division, including 20,000 patents (of which 10,000 were U.S. patents), many of which were subject to existing licenses in favor of Intel, IBM, Hynix, and Texas Instruments. As part of the agreement, Qimonda was granted a license to those intellectual property rights remaining with Infineon and to future patents, while Infineon received a license to the transferred patents as well as future patents. Approximately \$1 billion of its €4.5 billion in annual revenues is derived from sales and operations in the United States, where it has 650 employees located at research and manufacturing facilities located in California and Detroit. Its vice president for intellectual property, Joseph Villella, Jr., testified that without the benefit of its license to Qimonda's U.S. patents, the vast majority of which originally belonged to Infineon, Infineon would be placed in the position of "innovating into law suits and injunctions" and would likely end up having "to pay a lot of money" for the right to continue using patents that it had developed. Additionally, he testified that Infineon could face significant indemnity claims from its own licensees of those patents if Dr. Jaffé were to carry through on his threat (communicated at a meeting in September 2009) to bring exclusion actions against Infineon's customers before the United States International Trade Commission ("ITC").

D.

Samsung, which is based in Korea, is a global manufacturer of consumer electronic goods, including flat screen televisions and mobile telephones. It also manufactures semiconductor chips both for its own use and for sale to other manufacturers. It has been the top

producer of commodity DRAM products in the world for many years and now produces approximately 35% of the world's commodity DRAM products. It is also the top-ranked producer of a type of non-volatile memory referred to as "NAND flash" memory and is a major supplier to many U.S. companies, including such major technology firms as Apple and Hewlett Packard, with total sales in the United States in 2010 of \$40 billion. Approximately 4,500 of its 150,000 employees work in the United States. It has a fabrication facility in Austin, Texas, as well as sales offices in New Jersey and California. Last year, it announced plans to invest approximately \$3.4 billion to expand the capacity of its Austin fabrication and semiconductor research facility, bringing its total investment in Austin to approximately \$9 billion.

Samsung owns approximately 90,000 patents worldwide, of which approximately 20,000 are U.S. patents. It entered into a patent cross-license agreement with Siemens in 1995 for a perpetual and irrevocable license to Siemens's patents. In 2006, Qimonda expressly undertook to be bound by the license agreement that Samsung had with Siemens and Infineon and to continue granting licenses to Samsung in return for a reciprocal obligation from Samsung. Its vice-president and director of licensing, Jae Shim, testified that Samsung's licenses to Qimonda's U.S. patents are critical to its semiconductor operations and that Samsung had invested billions of dollars in reliance on the belief that it had achieved freedom of action with respect to the licensed patents.

E.

Nanya, which is based in Taiwan, is a manufacturer of DRAM products. It has sales offices in the United States, Europe, Japan, and China. It does not manufacture in the United States but does operate (though subsidiaries) a sales organization in California and design

facilities in Texas and Vermont. Between 20% and 40% of its annual DRAM sales are made directly to customers in the United States. Nanya shares 50% of the total wafer output from Inotera Memories, Inc. ("Inotera"), also a Taiwanese company. Inotera, which operates two fabrication facilities, was formed in 2003 as a joint venture between Nanya and Infineon. Under the technical cooperation agreement that was entered into as part of the joint venture, Nanya was granted a fully paid-up, world-wide license to Infineon's 110 nm technology. 5 with the two working together to jointly develop 90nm and 70nm DRAM processes that would allow a larger number of memory cells to reside on a single chip. As part of the joint development project, both Nanya and Infineon contributed engineering personnel as well as their existing proprietary technologies, with the technical cooperation teams working primarily at two Infineon facilities in Germany. In 2005, Nanya entered into a second technical cooperation agreement with Infineon, this one for the development of 60 nm DRAM. The development work was mostly carried out in Germany, and, as with the earlier agreement, Nanya was granted a fully paid-up license for any patents resulting from the joint development efforts, as well as for any existing patents. Qimonda succeeded to Infineon's interest at the time of the spin-off in 2006, and in 2007 entered into a technical information exchange agreement with Nanya. In 2008, Micron bought Qimonda's shares in Inotera. In connection with that purchase, the existing joint venture between Nanya and Qimonda was formally terminated. The termination agreement, which is governed by New York law, provided that the license rights under the earlier technical cooperation agreements remained in full force and effect. Additionally, a patent ownership and license agreement was

<sup>&</sup>lt;sup>5</sup> A nanometer (abbreviated nm) is one-billionth of a meter, or approximately .000000039 inch.

subsequently entered into by Nanya and Qimonda in late 2008 (but apparently never fully carried out) to allocate between them the jointly-owned patents. In late July 2009, Nanya received a letter from Dr. Jaffé declaring "non-performance" of the joint venture termination agreement and terminating Nanya's license rights.

F.

Hynix—formerly known as Hyundai Electronics Industries Co., Ltd.—is a Korean manufacturer of semiconductor products, principally DRAM memory and NAND flash memory chips, but also CMOS image sensors. It currently ranks second in market share for DRAM products and fourth for NAND flash memory. Its research and development costs are substantial, averaging just over 9% of revenues in the last three years. During that same period, its capital expenditure on new fabrication facilities and upgrading existing facilities has averaged approximately \$2 billion per year. Hynix's fabrication facilities are located in Korea and China, and it has research and development centers in Korea and (though a subsidiary) the United States. Approximately 20% to 25% of its annual semiconductor sales are made to customers located in the United States. Hynix itself owns approximately 46,000 patents world-wide, of which more than 6,500 consist of U.S. patents.

To obtain "patent freedom" and thereby avoid possible disruptions to its operations, and also to protect its customers from claims of infringement from others, Hynix has negotiated and entered into portfolio cross-licenses with many of its competitors and other major semiconductor manufacturers, including Infineon. The Infineon cross-license agreement—which requires no royalties—was entered into in late 2000 in order to settle litigation that had been brought by Siemens (before the Infineon spin-off) against another company that Hynix later acquired. The

agreement currently extends to December 2011, at which time it would be extended for another two years unless one of the parties gives timely notice of non-renewal. Hynix has no agreement directly with Qimonda. Hynix first learned of Qimonda's insolvency proceedings in January 2010 when it receive notice of a motion filed in this court by Dr. Jaffé to establish procedures for the sale of the U.S. patents.<sup>6</sup> It subsequently received a letter from Dr. Jaffé stating that he elected non-performance of the Hynix-Infineon cross-license "to the extent applicable between [Qimonda] and Hynix" and that he terminated the agreement "to the extent it concerns [Qimonda]." In reliance on the cross-license, Hynix has not studied the scope or validity of any Qimonda patents, and no Qimonda patents have yet been asserted against Hynix, its products, or its customers.

G.

Micron is a U.S. manufacturer of semiconductor devices, primarily DRAM and flash memory, but also CMOS image sensors. It has manufacturing facilities not only in the United States, but also in China, Italy, Japan, Puerto Rico, and Singapore. It is the largest manufacturer of DRAM in the United States, and approximately 50% of its DRAM and flash memory chips are manufactured in the United States. It has approximately 25,900 employees world wide, of which approximately 10,000 work in the United States. In October 2008, Micron purchased for \$400 million Qimonda's approximately 36% share interest in Inotera Memories, Inc., a DRAM

<sup>&</sup>lt;sup>6</sup> The motion—which was opposed by Hynix, Nanya, IBM, Elpida, Infineon, Samsung and ProMOS Technolgies, Inc. ("ProMOS") to the extent it sought to sell the patents "free and clear" of licensee interests—resulted in an order (Doc. # 254) entered on March 11, 2010, and amended on June 18, 2010 (Doc. # 265) allowing Dr. Jaffé to sell the debtor's U.S. patents but preserving any rights of the objectors with respect to their licenses pending the result of the present litigation and requiring that any agreement for sale of the patents contain a notice to that effect.

manufacturing joint venture between Qimonda and Nanya that included a fabrication facility in Taiwan. As part of the purchase, Qimonda and Micron entered into a world-wide, royalty-free cross-license agreement. Among other things, it recited that a "significant goal" of the agreement was to provide each of the parties "with worldwide freedom to make, use, import, offer to sell, sell, lease, license and/or otherwise transfer" products "without concern for suits claiming infringement of the Patents . . . licensed hereunder." In reliance on the cross-license, Micron, when planning the transition of the Inotera facility from manufacturing Qimonda's chips to its own chips, did not implement a "clean room," "fire wall" or similar protocol to protect against adoption of technology being used at the plant that fell within the scope of Qimonda's patents. And because of the cross license, Micron has never performed an analysis of whether in fact it practices any of the Qimonda patents.

Η.

IBM is a world-wide technology firm based in the United States. It manufactures semiconductor chips both for its clients and for its own advanced technology needs. Somewhat over 10% of its revenues are derived from its microelectronics division, which has approximately 6,000 U.S. employees, and sales in the United States accounted for a little over one-third of its total worldwide revenues. Its semiconductor products are critical components of complex mainframe computers that are used in banking, and its chips are also used in large networking devices built by other major manufacturers. All of IBM's semiconductor manufacturing is done in the United States. It has research and development centers in New York and fabrication

<sup>&</sup>lt;sup>7</sup> Dr. Jaffé has brought an action against Micron in the German courts to set aside the share purchase as a fraudulent transfer.

facilities in New York and Vermont, the latter being a so-called "trusted foundry" that manufactures highly secret products for the U.S. Government related to national security. IBM owns approximately 50,000 active patents world-wide, over 30,000 of which are U.S. patents. In 2003, IBM entered into a cross-licensing agreement with Infineon and its subsidiaries under which it was granted an irrevocable, fully-paid up license to Infineon patents and patent applications for the life of the patents. IBM has long been active in semiconductor joint development initiatives. In the 1990s, IBM, in conjunction with Siemens, developed a semiconductor manufacturing technology known as "trench" technology. That technology, which was passed down from Siemens to Qimonda and was used by Qimonda prior to the insolvency proceedings, is still used by IBM in many of its most important processors and semiconductor products. Qimonda's patent portfolio includes patents that cover "trench" technology. In 2006, IBM entered into a joint development agreement with Infineon and its subsidiaries to develop a type of DRAM technology referred to as "trench DRAM." As part of that agreement, IBM obtained a cross-license to patents covering the jointly-developed "trench" technology.

I.

Intel is a U.S. manufacturer of semiconductor chips for industries such as computing and communications. It is the world's largest semiconductor chip maker based on revenue. It does not manufacture DRAM chips but does sell NAND memory chips manufactured by IM Flash Technologies, LLC, a company formed by Intel and Micron. Approximately one-fifth of its revenues are generated from the Americas. As of 2009, more than half of its wafer fabrication took place in the United States, with the remaining fabrication taking place in Israel and Ireland.

Intel routinely obtains licenses to patent portfolios of third parties in the semiconductor industry to eliminate the risk that the third party could enjoin Intel from making or selling semiconductor products or impose significant costs on Intel by threatening or initiating patent litigation. Its director of licensing, Dana Hayter, testified that Intel relies on these cross licenses (which number more than a hundred and embrace approximately 800,000 patents) in making the enormous expenditures required each year for research and development and investment in manufacturing facilities in order to remain competitive. Intel does not have a cross-license agreement with Qimonda. It does, however, have a cross-license agreement with Infineon that was entered into in late 2005 before the Qimonda spin-off, as well as an earlier cross-license agreement with Siemens that was entered into before the Infineon spin-off. The Intel-Infineon agreement expressly provides that any patents subsequently transferred to a subsidiary, as well as any patents subsequently issued to a subsidiary, would be subject to the license. It also contains a choice of law provision that Delaware law would govern. In July 2010, Dr. Jaffé wrote a letter to Intel stating that he was terminating both the Intel-Siemens and Intel-Infineon cross licenses.

J.

Upon being appointed as Insolvency Administrator, Dr. Jaffé assessed Qimonda's cash position and determined that the company had a monthly burn rate of €120 million but only €40 million in cash reserves. As a result, he immediately cut costs in an effort to prevent the immediate collapse of Qimonda and its subsidiaries, both in Germany and abroad. After consulting with the creditors, he ultimately decided that the company should be liquidated. As part of his analysis, he identified contracts to which Qimonda was a party that fell within § 103 of the German Insolvency Code. Section 103 governs mutual contracts with respect to which

the obligations of the debtor and the counter-party have not been completely performed. Under German insolvency law, such contracts are automatically unenforceable unless the insolvency administrator elects to perform the contracts. In practice, to avoid any implied election of performance, an insolvency administrator will usually send a letter of non-performance to the counter-party. In Dr. Jaffé's view, Qimonda's patent cross-licenses with the objecting parties fell within §103. According to the testimony, that view prevails generally among German insolvency professionals but remains technically an open question, since it has never been ruled upon by Germany's highest court. Because Qimonda, once it ceased business operations, no longer had a need for the license from the counter-party, Dr. Jaffé determined that there was no consideration to the insolvency estate from Qimonda's continued license of its own patents to the counterparty. He testified that electing non-performance of the license agreements was appropriate, first, because there otherwise would be no compensation to the Qimonda estate for the use of the patents, and, second, because honoring the licenses would violate the principle of equal treatment of creditors. Accordingly, he sent letters of non-performance to all of the objectors except for Micron, with respect to which he was attempting to resolve unrelated issues arising from Micron's purchase of Oimonda's shares in Inotera. As noted, Elpida and Samsung responded by taking the position that they were protected by § 365(n) of the Bankruptcy Code with respect to Qimonda's U.S. patents. Additionally, Samsung initiated an arbitration proceeding in Vienna, Austria, in which it asserted that under German law, the license to Qimonda's patent portfolio was not terminated by the opening of the insolvency proceedings. And Infineon has brought a court action in Germany seeking a declaration that its license to Oimonda's patent portfolio is subsisting and enforceable and that its sublicenses to Hynix, IBM, Intel, Nanya and Samsung are

enforceable.

After determining that a going-concern sale of Qimonda could not be achieved, Dr. Jaffé explored ways of monetizing its principal asset, which was its patent portfolio. Initially, he considered a bulk sale of the portfolio, for which the most likely purchaser would be a so-called "non-practicing entity" or "NPE" (sometimes disparagingly referred to as a "patent troll") but ultimately concluded that such a sale would result in the NPEs, not the Qimonda estate, realizing the true value of the patents. He also hired a broker to attempt to sell three small packages of Qimonda's patents, but those efforts were unsuccessful. Accordingly, he decided that licensing the patents would be the best way to realize value from the patent portfolio. As part of this effort, he made offers to many of the objectors—including Infineon, Micron, Samsung, and Hynix—to re-license the patent portfolio. Subsequent to the remand from the District Court, Dr. Jaffé has filed pleadings committing to re-licensing Qimonda's patent portfolio at a reasonable and non-discriminatory ("RAND") royalty to be determined if possible though good faith negotiations, otherwise through arbitration under the auspices of the World Intellectual Property Organization ("WIPO").8 He testified that in the event a new license was not obtained it was "conceivable" that he would sue the former licensee for infringement but suggested that he would "not necessarily" sue customers of infringers, and that any decision would be based on his business judgment after considering the risks to the estate, limited resources, and creditor desire to expedite the proceedings. He did acknowledge, though, that in negotiations with Infineon he

<sup>&</sup>lt;sup>8</sup> The proposed terms for the arbitration were modified following the evidentiary hearing in response to criticism from some of the witnesses, primarily that the time periods for party submissions to the expert were too short. The current form of the proposal is set forth as an attachment to a proposed order filed on March 8, 2011 as Doc. # 597.

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had mentioned possible infringement claims against Infineon's customers, although he also professed not to know who those customers were. Mr. Villella, who was present at the negotiation, had a less benign view and testified that he viewed the presentation as threatening.

K.

The evidence at trial established that the semiconductor industry is characterized by the existence of what the experts have referred to as a "patent thicket," such that any given semiconductor device may incorporate technologies covered by a multitude of patents, many of which are not owned by the manufacturer of the device. Indeed, such is the number of potentially applicable patents that it is not always possible to identify which ones might cover a new product, and in any event it would be all but impossible to design around each and every patented technology used in any new semiconductor product. As a result, manufacturers must, as a practical matter, obtain licenses to many different patents held by many different owners in order to protect against potential infringement claims. Often, such licenses are agreed to as a component of settling actual or threatened infringement suits or in entering into joint development agreements. In both contexts, it is common for each party to license its relevant patents to the other, sometimes with the addition of equalizing payments (either up-front payments or so-called running royalties) to account for differences in the size and breadth of the respective patent portfolios.

Such cross-license agreements are highly beneficial in conferring "design freedom" on the licensees. In the absence of design freedom, manufacturers are subject to what the experts described as a "hold-up premium" if a particular semiconductor is ultimately determined to infringe on someone else's patent. This is because the construction of a fabrication facility

("fab") for semiconductor chips is an enormously expensive undertaking (in the range of two to five billion dollars). Once these expenses (referred to in the testimony as "sunk costs") have been incurred, they cannot be recovered if the design of the chip must be changed to avoid the infringement. The owner of the patent, knowing this, has much more leverage in negotiating a royalty for its use *after* the fact than if a license had been sought *before* the investment had been made. The difference between these hypothetical royalty terms ("ex ante" and "ex post") constitutes the hold-up premium.

In at least one context, however, patent owners may commit themselves in advance to licensing a patent on "ex ante" or so-called "reasonable and non-discriminatory" ("RAND") terms. This is when a particular patent is identified by the owner as necessary to a standard adopted by standard-setting organizations such as JEDEC, which sets standards for the semiconductor industry. The semiconductor industry relies heavily on standards to promote the interoperability of semiconductor products, improve design and production efficiencies, reduce the uncertainty of investments, encourage innovation, and facilitate market entry. Importantly, standardization results in lower prices and improves consumer choice over products such as cell phones, computers, and even automobiles that rely on and incorporate semiconductors. Today, over 95% of DRAM chips are compliant with one or more JEDEC standards. As a result, JEDEC requires that its members, prior to the adoption of a standard, notify JEDEC of any patents it owns that may be "essential" to practice a proposed standard and agree to license those patents on RAND terms. In practice, the determination of a RAND royalty is more of an aspirational goal than a mathematical methodology, with one witness characterizing RAND as a "flexible" standard and testifying that there was no "consensus in the industry" as to how it

should be calculated. Another witness, while conceding that the RAND process required by JEDEC has "worked moderately well in practice," also stated that the attendant negotiations were "extraordinarily difficult."

L.

One of the objectors' experts, Professor Jerry A. Hausman, explained that patent crosslicensing, by providing freedom of action (also referred to by various witnesses as "freedom to operate" or "design freedom") and by avoiding the hold-up problem, promotes not only investment and innovation in the semiconductor industry, but also competition and lower prices, to the great benefit of consumers. And joint development agreements ("JDAs"), because they provide opportunities for companies with different areas of expertise to work together, also foster innovation. Patent cross-licenses are a key component of JDAs because they guarantee that each party will have the opportunity to use any technology resulting from the joint development efforts. They also promote the efficient exchange and transfer of technology and innovation, because the parties to the agreement need not worry about being exposed to or using the other's patented technology. Professor Hausman further testified that eliminating the protection § 365(n) provides licensees in the event the licensor goes into bankruptcy would harm innovation by creating uncertainty, which in turn affects investment decisions. As Professor Hausman explained, the decision to make the large investments in research and development and in construction of fabrication facilities required in the semiconductor industry is heavily influenced by the level of uncertainty—the expected reward versus the risk of the investment. The required

<sup>&</sup>lt;sup>9</sup> Professor Hausman testified as an expert for all of the objectors except Micron, which called its own expert, William Bratic, whose testimony focused on the specific impact termination of the cross-licenses would have on Micron rather than on the industry as a whole.

rate of return for any given investment—the "hurdle rate"—increases dramatically with even small increases in uncertainty. He concluded, therefore, that increased uncertainty regarding the enforceability of patent licenses would necessarily lead to decreased investments, at least at the margin, as well as less spending on research and development, and less innovation. And innovation, he testified, is key to the continued health of the United States economy:

Well, innovation and technology investment are among the most important features of the US economy. As we have heard, once upon a time Texas Instruments used to produce a lot of [DRAM] in the United States. Now Micron is the only [DRAM] US company that produces [DRAM] in the United States. And most of it's moved offshore. I can explain the economic reasons, if people are interested. But the US has stayed in the forefront of semiconductors because of companies like Intel and IBM. Intel has continued to manufacture semiconductors in the US, but also it's because of the innovation that's gone on in the US. And this investment, although a lot of the manufacturing gets done overseas, the investment and innovation is done in the US. I heard His Honor say, of course, that most of Apple is produced offshore. Which is absolutely correct. But, and I'm going to use public numbers here, so hopefully no one will get heartburn. But an Apple [iPhone] sells for between 5 and 600 depending much memory it has. The parts for that cost about 180. The assembly cost by Foxcon in China is about \$4 and a dime. And so why is an [iPhone] worth all that money. It's not the parts. It's not the assembling in China. It's because of the software. That's all US innovation and technology investment. . . . So even though the stuff is getting manufactured and assembled overseas, most of the value added is remaining in the US. So for an [iPhone] pretty much 300, 350 out of 500 or 600 stays in the US. . . . So it's not the manufacturing so much. I think it's really the innovation and the R&D that drives the modern economy.

#### 3/3/11 Tr. 260-62 (emphasis added).

By contrast, the insolvency administrator's economic expert, Dr. William O. Kerr, testified that there is no reason to believe that the objectors' research and development would be affected by a decision that § 365(n) does not apply. As he analyzed the situation, the cross-licenses originally represented value streams going in both directions over the life of each agreement, and that having to pay cash for the licenses now only changes the *form* of

compensation the objectors will have to provide to Qimonda, not the *value*. In his view, Dr. Jaffé's commitment to re-license the Qimonda patent portfolio to the objectors on RAND terms would simply result in the objectors paying fair value for rights to use the technology embodied in the portfolio. He also noted that a decision applying § 365(n) would only preserve the objectors' rights to the U.S. patents, and that, regardless of this court's decision, new licenses will have to be negotiated for use of Qimonda's non-U.S. patents. By analyzing the terms of a large number of existing licenses to which the objectors are currently parties, and assuming that a RAND royalty would be in the lower portion (but at the mode) of the range that was being charged under existing agreements, Dr. Kerr concluded that payment of such a royalty—which he calculated at no more than 3.6% of the industry's annual research and development spending—would have a minimal effect on innovation. Finally, he calculated that if the objectors did not have to pay for the continued right to use the U.S. patents, the loss of licensing revenues to Qimonda's estate would be approximately \$47 million.

M.

The evidence presented at trial shows that "design freedom," while an important goal of cross-license agreements, is never completely realized and in any event often involves payments of large sums. Put another way, notwithstanding the many cross-license agreements to which the objectors are parties, the industry is nevertheless characterized by frequent patent disputes that are often resolved by payments of large sums, either to other manufacturers or to NPEs. One of the objectors, for example, has paid approximately \$3 billion since 2007 to settle various infringement claims. Another has paid nearly \$900 million to settle such claims. And at least some of the objectors, although condemning the activities of NPEs have either sold patents to an

NPE or have acquired an ownership interest in an NPE. Indeed, an infringement action that one of the objectors paid \$85 million to settle involved patents that another of the objectors had sold to an NPE. Finally, while none of the cross-licenses with respect to which Dr. Jaffé has given notice of non-performance provide for running royalties, the objectors are parties to many other licenses that do provide for running royalties.

## Conclusions of Law and Discussion

I.

Chapter 15—which replaced former § 304 of the Bankruptcy Code—was enacted by Title VIII of the Bankruptcy Abuse Prevention and Consumer Protection Act of 2005 ("BAPCPA"), Pub. L. No. 109-8, 119 Stat. 23 (Apr. 20, 2005). Its stated purpose is "to incorporate the [United Nations Commission on International Trade Law ("UNCITRAL")] Model Law on Cross-Border Insolvency so as to provide effective mechanisms for dealing with cases of cross-border insolvency," and its objectives are to promote:

- (1) cooperation between—
- (A) courts of the United States, United States trustees, trustees, examiners, debtors, and debtors in possession; and
- (B) the courts and other competent authorities of foreign countries involved in cross-border insolvency cases;
- (2) greater legal certainty for trade and investment;
- (3) fair and efficient administration of cross-border insolvencies that protects the interests of all creditors, and other interested entities, including the debtor;
- (4) protection and maximization of the value of the debtor's assets; and
- (5) facilitation of the rescue of financially troubled businesses, thereby protecting investment and preserving employment.

§ 1501(a), Bankruptcy Code. Among other relief, chapter 15 allows the foreign representative 10

<sup>&</sup>lt;sup>10</sup> A "foreign representative" is defined as "a person or body. . . authorized in a foreign proceeding to administer the reorganization or the liquidation of the debtor's assets or affairs or (continued...)

of an insolvency proceeding in another country involving a debtor with assets in the United States to petition a U.S. bankruptcy court for recognition of the foreign proceeding. § 1504. Bankruptcy Code. Upon recognition of a foreign proceeding, the foreign representative "is entitled to participate as a party in interest in a case regarding the debtor," § 1512, Bankruptcy Code, and "may exercise the rights and powers of a trustee under and to the extent provided by [§§] 363 and 552." § 1520(a)(3), Bankruptcy Code. Additionally, but "subject to any limitations the court may impose consistent with the policy of [chapter 15]," U.S. courts are required to "grant comity or cooperation to the foreign representative." § 1509(b)(3), Bankruptcy Code. Finally, "where necessary to effectuate the purpose of [chapter 15] and to protect the assets of the debtor or the interests of the creditors," the U.S. court may grant "any appropriate relief," which may include "entrusting the administration or realization of all or part of the debtor's assets within the territorial jurisdiction of the United States to the foreign representative" and—with the exception of certain avoidance powers—granting "any additional relief that may be available to a trustee." § 1521(a)(5), (7), Bankruptcy Code. Such relief may be granted, however, "only if the interests of the creditors and other interested parties, including the debtor, are sufficiently protected." § 1522(a), Bankruptcy Code. Importantly, nothing in chapter 15 bars the U.S. court "from refusing to take an action governed by [chapter 15] if the action would be manifestly contrary to the public policy of the United States." § 1506, Bankruptcy Code.

Although the question has not yet been authoritatively decided by Germany's highest

<sup>&</sup>lt;sup>10</sup>(...continued) to act as a representative of such foreign proceeding." § 101(24), Bankruptcy Code.

court and technically remains open, this court—as did the District Court<sup>11</sup>—will assume that under § 103 of the German Insolvency Code an insolvency administrator, by electing non-performance of a patent license agreement, may terminate a licensee's right to use the debtor's patents. A very different result would obtain under U.S. bankruptcy law. Although a trustee or debtor in possession may reject an executory contract under which the debtor is the licensor of "intellectual property"—which is defined as including United States patents, § 101(35A), Bankruptcy Code—the licensee may elect "to retain its rights (including a right to enforce any exclusivity provision of such contract) under such contract." § 365(n)(1)(B), Bankruptcy Code. The licensee must, of course, make any royalty payments due under the contract. § 365(n)(2)(B), Bankruptcy Code. In addition, the licensee waives any rights of setoff or administrative claim. § 365(n)(2)(C), Bankruptcy Code.

The protections afforded patent licensees by § 365(n) have their origins in Congressional reaction to the decision of the United States Court of Appeals for the Fourth Circuit in *Lubrizol Enterprises, Inc. v. Richmond Metal Finishers, Inc.*, 756 F.2d 1043 (4th Cir. 1985). The debtor in that case, Richmond Metal Finishers, Inc., had granted Lubrizol Enterprises, Inc., a non-exclusive license to use a metal coating process technology the debtor owned. As part of its reorganization plan, the debtor sought to reject the license agreement. The Fourth Circuit affirmed the bankruptcy court's legal determination that the license agreement, even though fully paid-up, was nevertheless executory (based in part on the inclusion of a "most favored licensee" clause under which royalties would be reduced if the debtor licensed the process to anyone else). The Fourth Circuit also affirmed the bankruptcy court's factual finding that rejection represented

<sup>&</sup>lt;sup>11</sup> *Qimonda*, 433 B.R. at 565 n.28.

the exercise of sound business judgment by the debtor because "continued obligation to Lubrizol under the agreement would hinder [the debtor's] capability to sell or license the technology on more advantageous terms to other potential licensees." Importantly, Fourth Circuit rejected the argument that rejection, because it only constitutes a breach of the contract, would not actually deprive Lubrizol of the right to use the licensed technology:

Under 11 U.S.C. § 365(g), Lubrizol would be entitled to treat rejection as a breach and seek a money damages remedy; however, it could not seek to retain its contract rights in the technology by specific performance even if that remedy would ordinarily be available upon breach of this type of contract. Even though § 365(g) treats rejection as a breach, the legislative history of § 365(g) makes clear that the purpose of the provision is to provide only a damages remedy for the non-bankrupt party. For the same reason, Lubrizol cannot rely on provisions within its agreement with [the debtor] for continued use of the technology by Lubrizol upon breach by [the debtor]. Here again, the statutory "breach" contemplated by § 365(g) controls, and provides only a money damages remedy for the non-bankrupt party. Allowing specific performance would obviously undercut the core purpose of rejection under § 365(a), and that consequence cannot therefore be read into congressional intent.

757 F.2d at 1048 (internal citations omitted). Bills were quickly introduced into both houses of Congress to overturn the result that had been reached in *Lubrizol* and a substitute Senate version was ultimately enacted as the Intellectual Property Licenses in Bankruptcy Act of 1987, Pub.L. No. 100-506, 102 Stat. 2538 (Oct. 18, 1988). The report of the Senate Judiciary Committee that accompanied the Act explained its purpose as follows:

The purpose of the bill is to amend Section 365 of the Bankruptcy Code to make clear that the rights of an intellectual property licensee to use the licensed property cannot be unilaterally cut off as a result of the rejection of the license pursuant to Section 365 in the event of the licensor's bankruptcy. Certain recent court decisions interpreting Section 365 have imposed a burden on American technological development that was never intended by Congress in enacting Section 365. The adoption of this bill will immediately remove that burden and its attendant threat to the development of American Technology and will further clarify that Congress never intended for Section 365 to be so applied.

S. Rep. No. 100-505, 1988 U.S.C.C.A.N. 3200 (emphasis added).

II.

In remanding the Amended Supplemental Order further consideration, the District Court identified two issues to be resolved: first, whether limiting the applicability of § 365(n) "appropriately balanced" the interests of the debtor and the licensees as required by § 1522(a); and second, whether granting comity to German insolvency law would be "manifestly contrary to the public policy of the United States" within the meaning of § 1506. *Qimonda*, 433 B.R. at 558, 571.

### A. Balancing the Interests of the Foreign Debtor and the Licensees

With respect to the first issue, the District Court held that this court had not adequately articulated its reasons for concluding that application of § 365(n) "would unavoidably 'splinter' or 'shatter' the Qimonda patent portfolio 'into many pieces that can never be reconstructed,' thereby diminishing its value and rendering the . . . patent portfolio essentially unsalable." *Qimonda*, 433 B.R. at 558. The District Court also concluded that this court's analysis did not sufficiently take into account "the nature of the U.S. patents licensed to [the objectors], and whether cancellation of licenses for those patents would put at risk [the objectors'] investments in manufacturing or sales facilities in this country for products covered by the U.S. patents," with the appropriate test being that articulated in *In re Tri-Continental Exchange, Ltd.*, 349 B.R. 627 (Bankr. E.D. Cal. 2006) (explaining that § 1522 requires the court "to tailor relief and conditions so as to balance the relief granted to the foreign representative and the interests of those affected by such relief, without unduly favoring one group of creditors over another."). *Qimonda*, 433 B.R. at 558.

The argument that preserving the objectors' rights to use Qimonda's U.S. patents would "splinter" or "fracture" Qimonda's portfolio has not been pursued by Dr. Jaffé on remand and in any event has no support in the evidence. The licenses in question are non-exclusive, and nothing prevents Dr. Jaffé or any purchaser of the patent portfolio (or portions of it) from licensing the patents to other manufacturers. At the same time, there are very few practicing entities not already licensed, and the universe of potential new licensees is limited. Put most simply, licensing the U.S. patents to manufacturers not already having licenses will likely generate relatively little income for Qimonda's estate, while re-licensing them to the existing licensees, even on RAND terms, would generate significantly more.<sup>12</sup>

A significant complicating factor is that any particular invention may, and commonly is, patented by the inventor in multiple jurisdictions, since patent protection does not have extraterritorial effect. As a result, a licensee, in order to be protected against an infringement suit, must license the applicable patent for each jurisdiction in which the licensee expects to manufacture or sell products that embody the patent. None of the objecting parties limit their manufacturing and sales solely to the United States. Thus, regardless of whether the licensees retain the right to use the U.S. patents, they would still have to make their peace with the insolvency administrator with respect to the foreign patents covering the same technology if they were to continue manufacturing or selling their products outside the United States.

A further complicating factor is that none of the objectors have identified any specific

In questioning Dr. Jaffé and his German insolvency law expert, Professor Christopher G. Paulus, the objectors sought to characterize his legal obligation to maximize returns to creditors in a nefarious light But, of course, a trustee in a U.S. bankruptcy case has exactly the same responsibility. Indeed, one of the express objectives of chapter 15 is "maximization of the value of the debtor's assets." § 1501(a)(4), Bankruptcy Code.

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U.S. patent owned by Qimonda the cancellation of which would jeopardize their continued manufacture or sale within the United States of any particular product they produce. The closest to a showing of concrete, rather than hypothetical, risk was made by IBM, since it—like Qimonda, but unlike the other objectors—relies heavily on "trench" technology, which is the subject of a number of Qimonda's patents. As the objectors argue, however, their inability at this time to identify specific Qimonda patents implicated by the products they manufacture and sell is not at all surprising, since the whole point of portfolio cross-licenses is to eliminate the necessity (and in some cases impossibility) of individually analyzing each and every patent that might possibly apply to determine if a new design infringes on it. Yet in terms of the inquiry directed by the District Court—"the nature of the U.S. patents licensed to [the objectors], and whether cancellation of licenses for those patents would put at risk [the objectors'] investments in manufacturing or sales facilities in this country for products covered by the U.S. patents"—the failure to identify specific patents prevents this court from making a finding that cancellation of the objectors' right to use Qimonda's U.S. patents would have a specific dollar impact on them, only that it creates a substantial risk of harm. On the other hand, it ill behooves Dr. Jaffé to argue that the objectors have not shown they actually practice any Oimonda patents, when he himself, in negotiations with them, has taken the position that they do and has prepared claim charts outlining what he believes their infringement exposure to be. Put another way, the threat of infringement litigation can be as damaging as an actual finding of infringement.

To be sure, the hold-up risk is lessened by Dr. Jaffé's offer to re-license the patents on

RAND terms.<sup>13</sup> Although the revised proposed procedures for the WIPO expert determination if the parties cannot agree may not be optimal, they are not wholly unreasonable either, and while the compressed time schedules for submissions to the expert and the lack of discovery may limit the licensee's ability to present the strongest possible case, the insolvency administrator is equally disadvantaged in presenting his case.<sup>14</sup> And even though the determination of a RAND royalty may be as much an art as a science, the fact that companies in the industry routinely rely on the ability to obtain a license on RAND terms when they adopt a standard that relies on particular patents as essential to the standard demonstrates that RAND requirements do provide at least some comfort against the hold-up risk that would otherwise exist in an "ex post" licensing negotiation.

At the same time, even if the WIPO expert determination process were to arrive at the

An issue raised by the objectors, but not really resolved by the evidence, was whether any license from Dr. Jaffé would itself be insecure, because Dr. Jaffé could still sell the underlying patents to a purchaser—whether a practicing entity or a "troll"—that might itself file for insolvency under German law or transfer the patent to a special purpose entity for the purpose of having it file for insolvency under German law. Dr. Jaffé testified that any sale by him of the patents would be made subject to any licenses he had granted (and which he would retain). Whether that strategy, which has apparently never been tested, would actually protect the licensees is an open question.

<sup>14</sup> Indeed, Dr. Jaffé argues that he actually has *less* bargaining leverage than the objectors have in negotiating licensing terms with each other because, as a non-practicing entity, his ability to obtain injunctive relief in connection with a finding of infringement has been severely curtailed, if not eliminated, by the Supreme Court's ruling in *eBay, Inc. v. MercExchange, LLC*, 547 U.S. 388, 126 S.Ct. 1837, 164 L.Ed.2d 641 (2006). While that may be, the fact remains that in discussions with at least two of the licensees, Dr. Jaffé has made thinly veiled threats to seek exclusion orders from the ITC, and has gone so far as to incorporate Qimonda Licensing LLC in Florida for the stated purpose of establishing the "domestic industry" in the United States required in order to bring ITC exclusion actions. In any event, the precise degree of negotiating leverage Dr. Jaffé would otherwise have is immaterial given the commitment to arbitrate if agreement cannot be reached.

same figure that would have been agreed to in an "ex ante" scenario, the objectors, because of their sunk costs, do not have the option of avoiding royalties altogether by designing around the patent. And Infineon—because it developed at its own cost most of the patents it is now being asked to pay for (and for which it received in exchange only now-worthless stock in the debtor)—would be especially hard-hit, not only in having to pay a second time for its own technology, but in indemnifying parties to which it licensed the patents prior to transferring them to Qimonda as part of the spin-off.<sup>15</sup>

Certainly the issue is close. But having carefully considered the evidence and the argument of the parties, the court concludes that the balancing of debtor and creditor interests required by § 1522(a), Bankruptcy Code, weighs in favor of making § 365(n) applicable to Dr. Jaffé's administration of Qimonda's U.S. patents. It is true that application of § 365(n) will result in less value—and for the purpose of the present ruling the court accepts Dr. Kerr's estimate of \$47 million—being realized by the Qimonda estate. But Qimonda's patent portfolio will by no means be rendered worthless. The U.S. patents can still be licensed to parties that do not already have a license, and Dr. Jaffé, to the extent permitted by German law, will be able to fully monetize the non-U.S. patents. Application of § 365(n), moreover, imposes no affirmative burden on Dr. Jaffé. By contrast, the risk to the very substantial investment the objectors—particularly IBM, Micron, Intel, and Samsung—have collectively made in research and manufacturing facilities in the United States in reliance on the design freedom provided by

<sup>&</sup>lt;sup>15</sup> Of course, it could also be argued that Infineon, as a German company, was in a better position than the other objectors to assess the impact of German insolvency law on its license rights in the event Qimonda were to become insolvent and to take such risks into account in negotiating the terms of the spin-off.

the cross-license agreements, though not easily quantifiable, is nevertheless very real. For that reason—and even absent the public policy considerations to be discussed next—the court determines that Dr. Jaffé's right to administer the debtor's U.S. patents should be subject to the constraints imposed by § 365(n).

B. Whether the Failure of German Insolvency Law to Protect Patent Licensees is "Manifestly Contrary" to U.S. Public Policy

With respect to the public policy issue, the District Court, citing the legislative history of § 365(n) as a reaction to the *Lubrizol* decision, noted that "Congress carefully considered *Lubrizol's* public policy implications, and, by overturning *Lubrizol*, took affirmative steps to protect patents licensees from . . . termination of patent licenses in bankruptcy proceedings." *Qimonda*, 433 B.R. at 567. The District Court also explained, however, that Congress's use of the word "manifestly" in § 1506 "substantially limits" the public policy exception "to the *most fundamental policies* of the United States." *Qimonda*, 433 B.R. at 568 (emphasis added). As the district court noted, only four published decisions had addressed the public policy exception. <sup>16</sup> *Id.* at 568. The reported decisions all agreed that "the fact that application of foreign law leads to a different result than application of U.S. law is, without more, insufficient

Alternative Investments, 421 B.R. 685 (Bankr. S.D. N.Y. 2010) (upholding third-party releases approved by Canadian courts as part of foreign debtor's restructuring plan); In re Ernst & Young, Inc., 383 B.R. 773 (Bankr. D. Col. 2008) (recognizing Canadian receivership over Canadian company and two former Canadian residents now living in the United States as foreign main proceeding); In re Ephedra Prods. Liability Litig., 349 B.R. 333 (S.D. N.Y. 2006) (granting comity to Canadian insolvency court's claims resolution procedure that did not provide for jury trial of personal injury claims); and In re Gold & Honey, 410 B.R. 357 (Bankr. E.D. N.Y. 2009) (denying recognition of Israeli receivership proceedings that violated automatic stay in case of debtor's American subsidiary).

to support § 1506 protection." *Id.* Rather, the analysis properly focuses "on two factors: (i) whether the foreign proceeding was procedurally unfair, and (ii) whether the application of foreign law or the recognition of a foreign main proceeding under Chapter 15 would 'severely impinge the value and import' of a U.S. statutory or constitutional right, such that granting comity would 'severely hinder United States bankruptcy courts' abilities to carry out . . . the most fundamental policies and purposes' of these rights." *Id.* at 568-69 (ellipsis in original).

As the District Court emphasized, the fact that application of foreign law leads to a different result than application of U.S. law is, without more, insufficient to deny comity. There can be little doubt that the whole purpose of chapter 15 would be defeated if local or parochial interests routinely trumped the forum law of the main proceeding. Instead, this court must determine whether the foreign proceeding was "procedurally unfair," and whether the application of foreign law or the recognition of a foreign main proceeding would "severely impinge" a U.S. statutory or Constitutional right in a way that would offend "the most fundamental policies and purposes" of such right.

The objectors do not contend that either German insolvency law or the German insolvency proceedings in this case lack *procedural* fairness. Germany clearly has a mature and well-developed system of insolvency law with goals congruent to those of U.S. bankruptcy law, including maximizing returns to creditors and treating equally-situated creditors equally.<sup>17</sup>

<sup>17</sup> To be sure, both U.S. and German insolvency law recognize priorities that, to a greater or lesser extent, detract from the principle of equal treatment. But the mere fact that application of foreign law will result in different creditor priorities than those recognized by U.S. law is hardly a sufficient basis for not according comity to foreign law. At the same time, a licensee, even if technically a creditor, stands on a considerably different footing than, say, a lender, trade creditor, or customer. Even though a non-exclusive patent license conveys no property interest in (continued...)

Parties aggrieved by actions taken in a German insolvency case have ready access to a functioning and fair court system to challenge them (as indeed Infineon already has). The inquiry, therefore, resolves to whether the application of German law, to the extent it allows the U.S. patent licenses to be cancelled, severely impinges a U.S. statutory or constitutional right such that deferring to German law would defeat "the most fundamental policies and purposes" of such rights.

Here, of course, no Constitutional right is implicated, only a statutory right. That the right of a non-bankrupt licensee to continue using a patent license was deemed by Congress to be of great public *importance* can scarcely be doubted. The legislative history is clear that Congress believed that allowing patent licenses to be terminated in bankruptcy would "impose[] a burden on American technological development." Moreover, the alacrity with which Congress acted following the *Lubrizol* decision is ample evidence of the seriousness with which it viewed the "threat to American Technology" raised by the holding of that case. The question before the court, however, is whether the policy that § 365(n) seeks to promote is *fundamental*.

At the outset, it is curious that if Congress believed the protection conferred by § 365(n) to be fundamental, it did not include it among the Bankruptcy Code provisions that apply

<sup>&</sup>lt;sup>17</sup>(...continued)

the patent itself and "is in essence nothing more than a promise by the licensor not to sue the licensee," *Imation Corp. v. Koninklijke Philips Electronics N.V.*, 586 F.3d 980, 987 (Fed.Cir. 2009), performance of that promise, unlike a promise to repay a lender or supplier, or to deliver goods or provide services to a customer, requires no affirmative expenditure of funds or transfer of assets, only that the licensor refrain from taking an injurious action.

automatically once an order of recognition is entered in a cross-boarder case, <sup>18</sup> but instead made the application of § 365 generally, and § 365(n) in particular, entirely discretionary. *Qimonda*, 433 B.R. at 560-61 ("Congress sensibly left the application of § 365(n) to the discretion of bankruptcy courts, where appropriate."). The court notes, too, that the particular threat to American technology identified in the legislative history differs from the threat articulated by the objectors. The concern voiced in the legislative history was that allowing licenses to be cancelled in bankruptcy would encourage those seeking to use a patent to insist on an assignment rather than a mere license. S. Rep. 100-505 at 3, 1988 U.S.C.C.A.N. at 3202-03. As a result, the financial return to the inventor would likely be less than the return from licensing the patent to multiple parties, thereby causing inventors "to be shortchanged to adjust for a risk which under present law cannot be contractually removed if a license format is selected" and "creat[ing] obvious disincentives to the full development of intellectual property." *Id*.

Here, the objectors focus on an entirely different threat, namely the uncertainty that would be created by allowing licenses to be cancelled. They argue that even the threat that a licensee, having already paid once, might have to pay a second time on "hold up" terms in order to continue practicing the licensed patent, would discourage the kind of heavy investment, not only in research and development, but more importantly in construction of manufacturing facilities, that are required in the semiconductor industry. Although Professor Hausman could not identify any specific technology that would not have been pursued against the backdrop of uncertainty if

The provisions that apply automatically are § 361 (property of the estate), § 362 (the automatic stay), § 363 (use, sale, or lease of property), § 549 (avoidance of unauthorized postpetition transactions), and § 552 (postpetition effect of a security interest). § 1520(a), Bankruptcy Code.

§ 365(n) were not to apply, he posited that many innovative products, such as the iPhone, might well have come to market later. By contrast, Dr. Kerr opined essentially that the sky would not fall if § 365(n) were held *not* to apply and the objectors had to pay a RAND royalty to obtain new licenses. The objectors themselves, after all, pay or have paid significant royalties to settle past infringement claims (some of which they have brought against each other) but nevertheless continue to invest large sums in research and development. Because the specific royalty rate estimated by Dr. Kerr was deemed to be "highly confidential," it has not been disclosed to Dr. Jaffé. As a result, there is no evidence in the record as to whether Dr. Jaffé (absent the agreement for arbitration) would actually be willing to license the patents on the terms envisioned by Dr. Kerr. It seems likely, however, that a WIPO expert would go through a process similar to Dr. Kerr's in determining a RAND royalty rate if the parties were unable to agree, and that the royalty range derived by Dr. Kerr from his analysis of existing license agreements is not radically different from the figure that would be arrived at though the WIPO expert determination process.

It is certainly true, as Dr. Jaffé argues, that the mere threat of infringement claims if § 365(n) is not made applicable is nothing new in an industry in which the objectors themselves often bring infringement claims against each other and sometimes even sell portions of their patent portfolios to non-practicing entities. Thus, there will be plenty of patent threats and patent litigation in the industry whether or not § 365(n) applies. But the issue is not whether there is or ever can be complete "patent peace," but whether declining to apply § 365(n) in the context of the semiconductor industry would nevertheless adversely threaten U.S. public policy favoring technological innovation. Although innovation would obviously not come to a grinding halt if licenses to U.S. patents could be cancelled in a foreign insolvency proceeding, the court is

persuaded by Professor Hausman's testimony that the resulting uncertainty would nevertheless slow the *pace* of innovation, to the detriment of the U.S. economy. Thus, the court determines that failure to apply § 365(n) under the circumstances of this case and this industry would "severely impinge" an important statutory protection accorded licensees of U.S. patents and thereby undermine a fundamental U.S. public policy promoting technological innovation. For that reason, the court holds that deferring to German law, to the extent it allows cancellation of the U.S. patent licenses, would be manifestly contrary to U.S. public policy.

III.

A separate order will be entered denying the foreign administrator's motion to amend the Supplemental Order and confirming that § 365(n) applies with respect to Qimonda's U.S. patents. It goes without saying that nothing in the court's ruling affects the foreign administrator's right, to the extent permitted under German insolvency law, to terminate licenses to non-U.S. patents.

October 28, 2011	/s/ Stephen S. Mitchell
Date:	•
	Stephen S. Mitchell
Alexandria, Virginia	United States Bankruptcy Judge

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