

MAY 20 2010

CHRIS R. JOHNSON, CLERK

BY

DEPUTY CLERK

UNITED STATES DISTRICT COURT
WESTERN DISTRICT OF ARKANSAS
FAYETTEVILLE DIVISION

MITSUBISHI HEAVY
INDUSTRIES, LTD. and
MITSUBISHI POWER SYSTEMS
AMERICAS, INC.,

Plaintiffs,

v.

GENERAL ELECTRIC COMPANY,

Defendant.

Civil Action No. 10-5087

Demand for Jury Trial

COMPLAINT

Plaintiffs Mitsubishi Heavy Industries, Ltd. (“MHI”) and Mitsubishi Power Systems Americas, Inc. (“MPSA”) – collectively, “Mitsubishi” – bring this action against defendant General Electric Company (“GE”) to recover for antitrust and other injuries. Plaintiffs allege the following based on their personal knowledge, publicly available materials, detailed investigation by counsel, and upon information and belief:

NATURE OF THE ACTION

1. This case involves a scheme by GE to monopolize the sales of variable speed wind turbines in the United States. GE dominates the market, with a share of about 70%. In 2006, Mitsubishi gained a foothold in the U.S. market

after securing significant contracts for the sale of variable speed wind turbines.

Faced with this emerging competitive threat, GE embarked on an unlawful scheme to drive Mitsubishi and other providers out of the U.S. market. This scheme continues to this day and, if not stopped, will prevent effective competition.

2. As part of its unlawful scheme, GE has made baseless claims of patent infringement against Mitsubishi. GE knew that merely by initiating patent litigation against Mitsubishi, it would intimidate potential wind turbine purchasers and discourage them from purchasing Mitsubishi's wind turbines while the litigation was pending. GE also knew that other wind turbine manufacturers would fear the same loss of customers and potential sales.

3. GE's unlawful scheme has worked. Prior to the initiation of GE's first lawsuit against Mitsubishi, Mitsubishi had sales of approximately \$2 billion per year of variable speed wind turbines in the United States. Since GE's litigation campaign began over two years ago, Mitsubishi has not sold a single variable speed wind turbine in the United States. Several other manufacturers have succumbed to GE, taking licenses in order to continue selling in the United States.

4. GE launched its first suit against Mitsubishi in February 2008 by filing a complaint before the United States International Trade Commission ("ITC"). In the investigation, GE charged that Mitsubishi's variable speed wind

turbines infringed on three GE patents. Two years later, in January 2010, the ITC ruled against GE on its infringement claims against Mitsubishi.

5. Only weeks after the ITC's ruling – before Mitsubishi could begin to re-initiate its presence in the U.S. market – GE launched a new suit against Mitsubishi alleging infringement of two other GE patents not mentioned in its first suit. This, GE hoped, would prolong the period of uncertainty over Mitsubishi turbines in the U.S. market for the pendency of the second suit. In a press statement that accompanied the lawsuit, GE announced that “there are multiple areas where MHI's 2.4 megawatt wind turbines infringe on GE's existing patents.” GE Prepared Statement (Feb. 12, 2010). This statement was designed to lead potential customers to believe that, each time Mitsubishi defeated GE's claims of infringement in court, GE would simply file more patent suits.

6. Facing serial claims of patent infringement, Mitsubishi undertook its own investigation and evaluation of GE's allegations.

7. Mitsubishi discovered a shocking pattern. GE has built the portfolio of wind turbine patents it used against Mitsubishi by using knowledge it obtained in government-funded programs in the early 1980s and from sources outside the United States, without disclosing the original sources to the U.S. Patent and Trademark Office (“PTO”). GE has omitted references to studies; it has physically removed captions from graphs that disclose their originator; it has concealed

material prior art; and it has omitted the name of an inventor whom it did not control. GE's patent empire is built on a fabric of fraud.

8. GE's scheme has been difficult to detect because of the patents' technical complexity and because patent prosecution is an *ex parte* process in which over-committed Examiners with little time for independent analysis must rely on the submitting party to comply with federal law requiring complete candor in the disclosure of relevant prior art.

9. As set forth below, GE had ample reason to know that all five patents it has been asserting against Mitsubishi and others in the market either were procured or enforced through fraud, and yet GE has deliberately concealed its knowledge that the patents were unenforceable.

10. GE knew that its broad claim under U.S. Patent No. 5,083,039 ("the '039 patent") was invalid because of its own prior, publicly funded work in the 1980's. Using U.S. taxpayer money, GE researched variable speed wind turbine technology and published a report in 1984, disclosing the use of certain types of power devices called inverters on which GE had obtained patents. In 2002 – after those patents had expired – GE acquired a patent on related variable speed technology (the '039 patent) from the defunct Enron Corporation. GE knew that the claimed subject matter of the '039 patent was invalid in view of prior art because it was *GE's own 1984 report* that disclosed that claimed technology.

Nevertheless, in late February 2008, GE asserted this patent against Mitsubishi before the ITC. GE failed to produce the 1984 report even though Mitsubishi's discovery requests clearly encompassed it. GE filed and maintained the claim of patent infringement in bad faith.

11. GE obtained four additional patents through fraudulent conduct before the PTO, including withholding material prior art. In the absence of such conduct, these patents would have not issued. Despite knowing that the patents were unenforceable, GE has improperly filed and aggressively litigated claims of patent infringement against Mitsubishi because it knows that as long as it has a patent infringement lawsuit pending, Mitsubishi has great difficulty selling variable speed turbines.

12. GE has used the lawsuits as a marketing tool. GE has intimidated Mitsubishi customers by advising them either to purchase license agreements from GE or face patent infringement claims themselves.

13. GE's improper conduct has injured competition in the variable speed wind turbine industry, has hurt consumers, and has severely injured Mitsubishi's business. GE's aggressive use of its invalid patent claims has created an obstacle to implementation of various government initiatives for the encouragement of wind power as a renewable energy source.

14. GE's improper conduct also imperils Mitsubishi's investments in this State. On May 18, 2010, MPSA signed a development agreement with the State of Arkansas to construct and operate a wind turbine manufacturing plant in Fort Smith, Arkansas, on 100 acres of land formerly part of Fort Chaffee. The development agreement, which creates obligations on MPSA, secures the construction site and reflects an expected investment by MPSA of well over \$100 million. MPSA's plant will ultimately employ over three hundred people. It will manufacture nacelles – a core component of wind turbines which use the technology that is at the center of GE's attacks. If GE's improper conduct continues, the plant once built, will have to sit idle, as there may be no U.S. demand for Mitsubishi variable speed wind turbines.

15. Mitsubishi brings this action under the antitrust laws of the United States to remove the unlawful barriers to competition that GE has erected and to restore competition in the U.S. market. Mitsubishi also sues for violations of federal and state law barring unfair competition and interference with customer relationships. It seeks injunctive relief and to recover damages, including treble and punitive damages.

THE PARTIES

16. Plaintiff MPSA is a Delaware corporation with its corporate headquarters in the State of Florida. MPSA engages in the development,

manufacture, and distribution of variable speed wind turbines and components thereof. MPSA is a subsidiary of Mitsubishi Heavy Industries Americas, Inc. (“MHIA”), which is a wholly-owned subsidiary of Mitsubishi Heavy Industries, Ltd. (“MHI”).

17. Plaintiff MHI is a Japanese corporation with its principal place of business in Tokyo, Japan. MHI designs, manufactures, and distributes variable speed wind turbines and components thereof.

18. Defendant GE is a New York corporation with its principal offices in Fairfield, Connecticut. It is a diversified company that sells products and services throughout the United States. GE is the assignee and purported owner of the following patents pertaining to variable speed wind turbines: the '039 patent; U.S. Patent No. 6,921,985 (“the '985 patent”); U.S. Patent No. 6,879,055 (“the '055 patent”); U.S. Patent No. 7,629,705 (“the '705 patent”); and U.S. Patent No. 7,321,221 (“the '221 patent”).

JURISDICTION AND VENUE

19. Jurisdiction over Mitsubishi’s claims under the Sherman Act and the Lanham Act is proper under 28 U.S.C. §§ 1331 and 1337(a). Jurisdiction over Mitsubishi’s state law claims is proper under 28 U.S.C. § 1367(a) and the principles of supplemental jurisdiction.

20. This Court also has jurisdiction pursuant to 28 U.S.C. § 1332 in that this is an action between citizens of different states and the amount in controversy exceeds \$75,000 exclusive of costs and interest.

21. Defendant GE is subject to personal jurisdiction because GE has a registered agent for service of process in Arkansas and conducts business in this State.

22. Venue is proper in this judicial District pursuant to any one or more of the following statutes: 28 U.S.C. § 1391, 15 U.S.C. § 15, or 15 U.S.C. § 22. Defendant GE transacts business or is found in this District. Also, a substantial part of the events giving rise to the claims were intended to cause effects in this District.

I. The Relevant Market

A. The Relevant Product Market

23. The relevant product market is variable speed wind turbines.

24. Variable speed wind turbines are electricity-generating windmills outfitted with power converters that allow them to operate over a wide range of wind speeds when connected to a power grid transmission system.

25. The vast majority of variable speed wind turbines are purchased and installed as part of large facilities. Such facilities, often known as “wind farms,”

generate electric power for transmission over a power grid to be sold, ultimately, to consumers of electricity.

26. Fixed speed wind turbines are not part of the relevant market. From the purchasers' perspective, fixed and variable speed wind turbines are not interchangeable products for several reasons.

27. *First*, fixed and variable speed wind turbines have distinct characteristics and capabilities.

28. Fixed speed wind turbines rotate at a nearly constant speed designed to generate power at the single frequency required by the power grid. When wind conditions would cause a fixed speed wind turbine to rotate either too slowly or too quickly to produce electricity at the frequency required by the grid, the fixed speed turbine must be taken off-line. As a result, fixed speed wind turbines can provide their output to the grid only when wind speeds are within a relatively narrow range.

29. In contrast, variable speed wind turbines can generate power at the required grid frequency despite rotating at different speeds. They can therefore generate electricity over a much wider range of wind speeds. Variable speed wind turbines capture a significantly larger fraction of wind energy and generate more saleable electric power due to their ability to operate in a wider range of conditions.

30. Rapid power fluctuations are less common in variable speed wind turbines than in fixed speed wind turbines, due to the inclusion of technologies not normally found in fixed speed wind turbines.

31. Variable speed wind turbines have less complex pitch control and can produce less acoustic noise. This is important for wind farms located in populated regions. Because of the significant advantages of variable speed wind turbines, the development of variable speed wind turbines is one of the key advances that have made large-scale wind farms economically feasible.

32. *Second*, fixed and variable speed wind turbines have distinct pricing issues.

33. Variable speed wind turbines are more expensive than fixed speed wind turbines. The additional electrical and mechanical components of variable speed wind turbines make their purchase price substantially higher than that of fixed speed products.

34. However, variable speed wind turbines are more cost-effective because they have greater efficiency: they can run much more often than fixed speed wind turbines.

35. *Third*, fixed and variable speed wind turbines have distinct maintenance issues. For example, variable speed wind turbines suffer from less mechanical stress than fixed speed wind turbines.

36. *Finally*, there is currently more demand for variable speed wind turbines.

37. Most current purchasers in the United States prefer variable speed wind turbines over fixed speed products.

38. Nearly all commercial wind farm projects in the United States installed in 2009 or still under construction at year's end utilized variable speed wind turbines, with at least 1.5 megawatt ("MW") ratings and often much higher.

39. Thus, variable speed products currently constitute most of the commercial wind turbine sales in the United States. This trend is expected to continue.

40. In addition, the relevant product market does not include systems used to generate electric power from sources other than wind such as natural gas-fired, coal-fired, nuclear, hydro-electric, and solar power generation.

41. From the purchasers' perspective, variable speed wind turbines are not interchangeable with these forms of electric power generating systems. These systems depend upon entirely different sources of energy and raise different environmental concerns.

42. The power output from gas and coal turbines can be adjusted at will, but a wind turbine does not provide that capability. Wind farms also require large tracts of land, whereas gas turbine facilities generating comparable amounts of

electric power can be built on much smaller pieces of land. State and federal laws and regulations encourage wind-power generation through standards and tax credits. *E.g.*, American Recovery and Reinvestment Act of 2009, Pub. L. 111-5 (Feb. 17, 2009). These regulatory initiatives make wind turbines non-interchangeable with other forms of electric power generation in the eyes of purchasers.

43. Industry participants recognize a separate market for variable speed wind turbines. For example, wind turbine manufacturers GE, Gamesa and Siemens distinguish fixed and variable speed turbines in their marketing materials based on the different merits.¹ GE's complaint in the ITC proceedings sought protection for a domestic industry that makes products defined as "variable speed wind turbines and components thereof." GE Complaint in ITC Investigation, at ¶ 18.

B. Relevant Geographic Market and Barriers to Entry

44. The relevant geographic market is the United States of America.

45. Several factors separate the U.S. market from other geographic regions.

¹ *See, e.g.*, Siemens website at <http://www.energy.siemens.com/hq/en/power-generation/renewables/wind-power/wind-turbines/> (last visited May 17, 2010) (identifying the different wind turbine products – fixed and variable speed – and explaining the advantages and disadvantages to each).

46. Because of the size and weight of variable speed wind turbines – an erected Mitsubishi 2.4 MW turbine stands a football field high – their importation into the United States entails high transportation costs not incurred for domestically produced products. International transportation costs alone amount to over 20% of the price of a comparable turbine manufactured in the United States, without taking into account any import duties.

47. The high cost of transporting variable speed wind turbines into the United States not only segregates the U.S. market from those abroad, but also presents a formidable barrier to entry into the U.S. market by would-be new sellers.

48. To avoid or reduce those transportation costs, several market participants with foreign manufacturing sources, including Mitsubishi, have made large capital investments to develop assembly facilities for wind turbine nacelles, the turbine's principal mechanical component, for variable speed wind turbines in the United States.

49. A new turbine assembly facility in the U.S. for just the nacelle component of the variable speed wind turbine can carry a price tag in excess of \$100 million.

50. The capital outlays required at start-up, coupled with the lead time until production of saleable units, create further barriers to entry into the U.S. market.

51. The high transportation costs associated with shipping nacelles from Japan to the United States led to Mitsubishi's decision to build a nacelle manufacturing facility at Fort Chaffee. This facility will be MPSA's manufacturing headquarters for variable speed wind turbines deployed throughout the United States. Mitsubishi expects to spend over \$100 million on this project. Mitsubishi has made and will continue to make substantial investments in this facility in the expectation of stopping GE's anticompetitive scheme, but the value of these investments will be lost if GE succeeds at killing demand for the plant's output.

52. Also separating the United States from other geographic markets are different regulatory requirements that force manufacturers to build variable speed wind turbines for the United States with different technology.

53. For instance, the United States has different code and electric standard requirements than those that apply in Europe.

54. Manufacturers design and build variable speed wind turbines for specific wind farm projects, taking into account, among other factors, whether the wind farm project is located in Europe, the United States, or another market.

