

In the  
United States Court of Appeals  
For the Seventh Circuit

---

No. 12-3013

UNITED STATES OF AMERICA,

*Plaintiff-Appellee,*

*v.*

HANJUAN JIN,

*Defendant-Appellant.*

---

Appeal from the United States District Court for the  
Northern District of Illinois, Eastern Division.  
No. 08 CR 192 — **Rubén Castillo**, *Chief Judge*.

---

ARGUED SEPTEMBER 9, 2013 — DECIDED SEPTEMBER 26, 2013

---

Before POSNER, ROVNER, and HAMILTON, *Circuit Judges*.

POSNER, *Circuit Judge*. The defendant was charged with theft of trade secrets and economic espionage, both being offenses under the Economic Espionage Act. See 18 U.S.C. §§ 1831, 1832. A bench trial resulted in her conviction of theft of trade secrets but acquittal of economic espionage. The judge imposed a 48-month prison sentence. Her appeal challenges both her conviction and her sentence.

The defendant, a naturalized American citizen of Chinese origin who has a bachelor's degree in physics from a Chinese university and master's degrees in both physics and computer science from American universities, was employed by Motorola as a software engineer from 1998 to 2007 at the company's global headquarters in a Chicago suburb. Her duties primarily involved a cellular telecommunications system manufactured and sold by Motorola called iDEN, an acronym for Integrated Digital Enhanced Network.

She spent a protracted period in China in 2006 and 2007 while on a year-long medical leave from Motorola, and while there sought a job with a Chinese company called Sun Kaisens, which develops telecommunications technology for the Chinese armed forces. Shortly after returning to the United States in February 2007 she bought a one-way ticket to China on a plane scheduled to leave Chicago a few days later. In the interval before her scheduled departure she downloaded thousands of internal Motorola documents, all stamped proprietary, disclosing details of the iDEN technology. The government based its prosecution on three of these documents.

As her purchase of a one-way ticket to China indicated, along with the large amount of currency (\$31,000) that she was carrying when stopped by Customs agents at the airport, she intended to live in China and work there for Sun Kaisens. Asked by Customs and later the FBI what she was doing with thousands of Motorola documents relating to the iDEN system, she said she needed them in order to refresh her knowledge of it.

The documents contained trade secrets in the ordinary sense. But the statute that she was convicted of violating de-

defines the term “trade secret” elaborately, and one of the elements in the definition—an element she challenges—is that “the information [claimed to be a trade secret] derives independent economic value, actual or potential, from not being generally known to ... the public.” 18 U.S.C. § 1839(3)(B). The statute also defines “theft of trade secret” elaborately: the defendant must (so far as relates to this case) steal the trade secret for the purpose of conferring an “economic benefit [on] anyone other than the owner thereof, ... intending or knowing that the offense will injure any owner of that trade secret.” 18 U.S.C. § 1832(a). The defendant argues that her conduct satisfied neither requirement—that what she stole was not a trade secret and she neither intended nor knew that the theft would harm Motorola.

iDEN is a mobile telecommunications system developed by Motorola in the early 1990s. It is on its way out, supplanted by more advanced systems. But in 2007, when the theft occurred, Motorola still had many customers for iDEN—indeed about 20 million, spread over 22 countries including China.

iDEN’s most notable feature is “push to talk,” which allows handsets to operate as walkie-talkies but provides conventional cellular phone capabilities as well, such as texting and Internet access. Push-to-talk made iDEN systems attractive to law enforcement, emergency responders, taxicab dispatchers, and the like; the Israeli and South Korean armed forces were among iDEN’s customers. Other manufacturers besides Motorola offered push-to-talk capability, but iDEN was a complete end-to-end system that one witness testified had the fastest push-to-talk capability. Because the technology was treated by Motorola as a trade secret, iDEN could

be bought from and serviced only by Motorola or its licensees.

The defendant argues that because iDEN was rapidly losing its commercial cachet, the theft could not have harmed Motorola; no one would have tried to sell copies of iDEN, as keeping the iDEN technology secret conferred no economic benefit on Motorola. But as an engineer intimately familiar with iDEN, the defendant had to know that had she been able to fly to China with the iDEN documents in her luggage, Motorola, as soon as it discovered the theft, would have had to warn its customers of the risk that privacy of communications over the iDEN network had been or would be compromised. And it would have had to take countermeasures at some expense to itself. Moreover, once it learned that the defendant was going to work for a company that provides telecommunications services to the Chinese armed forces, it would have had to assume that there was a good chance that the defendant would show the stolen documents to the company, which in turn might use them to help the Chinese government hack into iDEN networks. The danger might be illusory, but Motorola could not assume that.

The defendant must also have known that Sun Kaisens or some other Chinese company would discover in those thousands of documents that she had stolen information that would make it easier to duplicate the iDEN system and thus create new iDEN networks, to compete with Motorola's network. Competitors could peel off some of those 20 million Motorola customers by offering a usable substitute at a lower price, being able to offer a lower price, yet still make a

profit, by virtue of not having incurred costs of research and development.

Motorola had taken elaborate precautions, albeit skillfully circumvented by the defendant, to keep the iDEN technology secret. It wouldn't have incurred the cost of those precautions had it not feared adverse consequences if the technology became public. The secrecy of the technology gave Motorola a monopoly. Maybe not a terribly valuable monopoly, in view of technological advances that would soon make iDEN obsolete, but a temporary monopoly generating supracompetitive profits that competition, enabled by the loss of secrecy, would erode.

The defendant denies any intention of showing any of the thousands of documents about iDEN that she stole to anyone in China (or elsewhere); they were just study aids. And the judge made no contrary finding. But what she was studying—what she was refreshing her knowledge of—was iDEN. In China she would be a walking repository of knowledge about iDEN that she could communicate to any company or government agency interested in hacking or duplicating iDEN. Could and would, because it would enhance her career prospects; what other motive could she have had for refreshing her knowledge of iDEN? So had she not been stopped from boarding the plane to China, she would have succeeded in conferring an economic benefit on herself and Sun Kaisens, and quite possibly on the Chinese military as well.

The government doesn't have to prove that the owner of the secret actually lost money as a result of the theft. For remember that the "independent economic value" attributable to the information's remaining secret need only be "poten-

tial,” as distinct from “actual.” 18 U.S.C. § 1839(3)(B). We held in *United States v. Lange*, 312 F.3d 263 (7th Cir. 2002), that information about the composition of aircraft brake assemblies was a trade secret even though that information might have been obtained (entirely lawfully) by reverse engineering of the brakes. For “completed assemblies must be exhaustively tested to demonstrate, to the FAA’s satisfaction, that all requirements have been met; only then does the FAA certify the part for sale . . . . It takes RAPCO [the victim of the theft of trade secrets] a year or two to design, and obtain approval for, a complex part . . . . But the process of experimenting and testing can be avoided if the manufacturer demonstrates that its parts are identical (in composition and manufacturing processes) to parts that have already been certified. What Lange, a disgruntled former employee, offered for sale was all the information required to obtain certification of several components as identical to parts for which RAPCO held certification.” *Id.* at 265.

*United States v. Chung*, 659 F.3d 815, 827 (9th Cir. 2011), is similar. It involved the theft of Boeing documents that described a phased-array antenna system for the space shuttle. Boeing had no competitors for the project and thus would not have experienced an immediate loss of profits from the disclosure of information in those documents. But the court found a theft of trade secrets nonetheless, because the information revealed how Boeing solves problems, something that competitors in other markets in which Boeing operates might want to know.

Coming closer to home, suppose a company in New Orleans had stolen the iDEN technology and was about to sell its first subscription to its brand-new iDEN network when

Hurricane Katrina destroyed the company. Would that mean that the company had stolen something that had no economic value? No; for what it stole had economic value though for extraneous reasons the value couldn't be monetized. The theft in the present case, as in our hypothetical case, might have injured Motorola by revealing that it couldn't keep secrets or prevent rivals from stealing its technology.

So there was adequate evidence of the defendant's guilt, and we turn to her challenge to the sentence.

The district judge acquitted her of the other crime that she was charged with—economic espionage, which required the government to prove that she had stolen the trade secrets intending to, or knowing that the theft would, benefit a foreign government, instrumentality, or agent. 18 U.S.C. § 1831(a). He thought her guilty of the offense, but not that it had been proved beyond a reasonable doubt. Nevertheless at sentencing he added two levels to her base offense level, pursuant to section 2B1.1(b)(5) of the sentencing guidelines, which requires such an increase “if the offense involved misappropriation of a trade secret and the defendant knew or intended that the offense would benefit a foreign government, foreign instrumentality, or foreign agent.” A judge need determine guilt of an offense only by a preponderance of the evidence in order to be allowed to factor that determination into his decision regarding the appropriate sentence for the offense of which the defendant has been convicted. *United States v. O'Brien*, 130 S. Ct. 2169, 2174 (2010); *United States v. Horne*, 474 F.3d 1004, 1006–07 (7th Cir. 2007).

The addition of the two levels brought the defendant's total offense level to 28, making her guidelines sentencing

range 78 to 97 months. The sentence the judge gave her—48 months—was much lower. Given her egregious conduct, which included repeatedly lying to federal agents (for which she could have been prosecuted but was not), she was fortunate to be the recipient of discretionary sentencing lenity based on her ill health and inability to join her family, now in China. The judge gave her a further, surprising break by reducing her offense level (by two levels) for acceptance of responsibility, U.S.S.G. § 3E1.1(a), despite her having pleaded not guilty and gone to trial.

AFFIRMED.