IN THE UNITED STATES DISTRICT COURT FOR THE EASTERN DISTRICT OF PENNSYLVANIA

UNITED STATES OF AMERICA : CRIMINAL ACTION

:

V.

:

KAI-LO HSU : NO. 97-323-01

MEMORANDUM

Dalzell, J. March 11, 1999

Defendant Kai-Lo Hsu argues that the recently-enacted Economic Espionage Act, 18 U.S.C. § 1831 et seq. ("EEA"), is unconstitutionally vague. Hsu's motion to dismiss the EEA charges in Counts Ten and Eleven of the Indictment raises serious concerns about the scope and clarity of the EEA that we at some length address here. 1

^{1.} In his motion papers and at oral argument on March 8, Hsu also pressed three other arguments about the EEA, which we rejected from the bench. First, Hsu argued that the EEA does not apply to products or processes in research and development and, thus, the $\underline{\text{Lopez}}$ interstate or foreign commerce requirement -- or indeed the statute's explicit requirement for such commerce -was not met in this case. We rejected that argument because "second generation" taxol technology (the technology that defendant Hsu is accused of attempting and conspiring to steal, and which is not yet commercially viable) is clearly "related to, " see EEA, 18 U.S.C. § 1832(a), the "first generation" taxol technology that Bristol-Myers Squibb currently uses to produce its Taxol from the bark of yew trees (taxus brevifolia). Second, we rejected Hsu's renewed legal impossibility defense as we (and our Court of Appeals) had previously addressed (and rejected) that argument. See <u>United States v. Hsu</u>, 155 F.3d 189 (3d Cir. 1998); United States v. Hsu, 982 F. Supp. 1022 (E.D. Pa. 1997). Finally, we rejected Hsu's novel legal argument that Counts Ten and Eleven of the Indictment should be dismissed because the Government failed to obtain approval from the Attorney General prior to commencing this case. We rejected that argument for three reasons: (i) the plain language of the EEA does not require prior approval by the Attorney General; (ii) Jack Keeney, then Acting Assistant Attorney General for the Criminal Division, approved the arrest of the defendant on June 11, 1997 (three days before the June 14, 1997 sting operation); and (iii) we should (continued...)

Defendant's Vaqueness Argument²

Hsu is charged in the Indictment with, <u>inter alia</u>, conspiracy to steal trade secrets in violation of 18 U.S.C. § 1832(a)(5) (Count Ten), and attempted theft of trade secrets in violation of 18 U.S.C. § 1832(a)(4)(Count Eleven). In his

3. 18 U.S.C. § 1832(a) provides:

Whoever, with intent to convert a <u>trade secret</u>, <u>that is</u> <u>related to or included in a product that is produced</u> <u>for or placed in interstate or foreign commerce</u>, to the economic benefit of anyone other than the owner thereof, and intending or knowing that the offense will, injure any owner of that trade secret, knowingly--

- (1) steals, or without authorization appropriates, takes, carries away, or conceals, or by fraud, artifice, or deception obtains such information;
- (2) without authorization copies, duplicates, sketches, draws, photographs, downloads, uploads, alters, destroys, photocopies, replicates, transmits, delivers, sends, mails, communicates, or conveys such information;
- (3) receives, buys, or possesses such information, knowing the same to have been stolen or appropriated, obtained, or converted without authorization;

(continued...)

^{(...}continued)

not give any weight to a letter by Attorney General Janet Renopromising Senator Orrin Hatch that she would give prior approval for all EEA cases and which was added to the legislative record of the EEA--as a basis for dismissing the indictment. See Conroy v. Aniskoff, 113 S. Ct. 1562, 1567 (1993) (Scalia, J., concurring) (in the course of explaining the illegitimacy of legislative history, paraphrasing Judge Harold Leventhal in describing the use of legislative history as "the equivalent of entering a crowded cocktail party and looking over the heads of the guests for one's friends").

^{2.} As the Court of Appeals recited the basic facts of this case in its Opinion, <u>see</u> 155 F.3d at 191-93, we will not rehearse them again here. <u>See also United States v. Hsu</u>, Crim. No. 97-323-01, 1999 WL 80952, at *1-*4 (E.D.Pa. Feb. 16, 1999) (explaining the procedural history of this case since the interlocutory appeal).

motion to dismiss Counts Ten and Eleven of the Indictment, Hsu argues that the EEA is unconstitutionally vague in two respects. First, he contends that the statute is unlawfully vague in that it fails to define the term "related to or included in" a product that is produced for or placed in interstate or foreign commerce. See 18 U.S.C. § 1832(a)(highlighted above). Second, Hsu argues that the definition of "trade secret" in 18 U.S.C. § 1839(3) offends due process with its vagueness because it does not define either "reasonable measures" to keep the information secret, or what is meant by information not being "generally known" or

(...continued)

⁽⁴⁾ attempts to commit any offense described in paragraphs (1) through (3); or

⁽⁵⁾ conspires with one or more other persons to commit any offense described in paragraphs (1) through (3), and one or more of such persons do any act to effect the object of the conspiracy, shall, except as provided in subsection (b), be fined under this title or imprisoned not more than 10 years, or both.

¹⁸ U.S.C. § 1832(a) (emphasis added). Furthermore, the EEA defines "trade secret" as:

[[]A]ll forms and types of financial, business, scientific, technical, economic, or engineering information, including patterns, plans, compilations, program devices, formulas, designs, prototypes, methods, techniques, processes, procedures, programs, or codes, whether tangible or intangible, and whether or how stored, compiled, or memorialized physically, electronically, graphically, photographically, or in writing if--

⁽A) the owner thereof has taken <u>reasonable measures</u> to keep such information secret; and

⁽B) the information derives independent economic value, actual or potential, from not being generally known to, and not being readily ascertainable through proper means by, the public.

¹⁸ U.S.C. § 1839(3) (emphasis added).

"readily ascertainable" to the public. <u>See</u> 18 U.S.C. § 1839(3) (highlighted above).

The Legal Landscape

It is well-recognized that due process requires a penal statute to "define [a] criminal offense with sufficient definiteness that ordinary people can understand what conduct is prohibited and in a manner that does not encourage arbitrary and discriminatory enforcement." Kolender v. Lawson, 461 U.S. 352, 357 (1983); see also United States v. National Dairy Prods. Corp., 372 U.S. 29, 32-33 (1963) ("Void for vagueness simply means that criminal responsibility should not attach where one could not reasonably understand that his contemplated conduct is proscribed"); <u>United States v. Pungitore</u>, 910 F.2d 1084, 1104 (3d Cir. 1990) ("A statute is unconstitutionally vague when it either forbids or requires the doing of an act in terms so vague that men of ordinary intelligence must necessarily guess as to its meaning and differ as to its application." (internal quotations omitted)). The void for vagueness doctrine, however, does not mean that a statute is unconstitutionally vague where "Congress might, without difficulty, have chosen 'clearer and more precise language' equally capable of achieving the end which it sought." <u>United States v. Powell</u>, 423 U.S. 87, 94 (1975) (quoting <u>United</u> States v. Petrillo, 332 U.S. 1, 7 (1947)).

It has also been the experience, as Professor Anthony
Amsterdam observed almost forty years ago, that "legislation

creating 'new' crimes (which does not generically tend to be unclear, but is likely to represent affirmative legislative intrusion into realms previously left to individual freedom) is particularly vulnerable to vagueness attack." Anthony G.

Amsterdam, The Void-for-Vagueness Doctrine in the Supreme Court, 109 U. Pa. L. Rev. 67, 84 (1960) (citing, e.g., Winters v. New York, 333 U.S. 507, 519-20 (1948); United States v. Reese, 92 U.S. 214, 219 (1875)). The EEA certainly constitutes such legislation, criminalizing, as it does, conduct that heretofore was thought best left to the civil law of unfair competition and cognate jurisprudence.

The developed case law recognizes that when, as here, the First Amendment is not implicated, a void for vagueness challenge must be unconstitutional as applied to the defendant and "must be examined in light of the facts of the case at hand." United States v. Mazurie, 419 U.S. 544, 550 (1975); United States v. Pungitore, 910 F.2d 1084, 1104 (3d Cir. 1990) (explaining that "[o]utside the First Amendment context, a party has standing to raise a vagueness challenge only insofar as the statute is vague as applied to his or her specific conduct" and citing Supreme Court cases such as New York v. Ferber, 458 U.S. 747, 767-69 (1982)).4

^{4. &}lt;u>Ferber</u> explains that we limit the standing requirement in non-First Amendment cases for two reasons: "the personal nature of constitutional rights . . . and prudential limitations on constitutional adjudication." <u>Ferber</u>, 458 U.S. at 767. Facial challenges to statutes that implicate First Amendment interests (continued...)

Analysis

Before addressing the merits of Hsu's vagueness arguments as applied to the facts of this case, we must address two contentions defense counsel pressed at the March 8 hearing on this motion.

First, this particular case does not implicate free expression and its attending First Amendment jurisprudence. This case only concerns Hsu's alleged pursuit of taxol technology, more specifically, the plant cell tissue culture technology to make Taxol, from an allegedly corrupt Bristol-Myers Squibb ("BMS") employee. At the hearing, defense counsel contended that free expression issues are implicated here because Tibor A. Rasz, the BMS employee who aided the Government "sting" operation on June 14, 1997 by posing as a corrupt employee, has a right freely to express himself and exchange information with the defendant, or with anyone else he thinks is a potential employer. argument must fail because Hsu does not have standing to raise Mr. Rasz's First Amendment rights. See, e.g., John E. Nowak and Ronald D. Rotunda, Constitutional Law § 2.12(f) (5th ed. 1995)(explaining the law of standing). Furthermore, even if Hsu had standing to champion such rights, in this case Mr. Rasz was knowingly participating in a Government sting operation and did

^{(...}continued)

have been permitted only because in such cases the very existence of an overly broad or vague statue could have a chilling effect on protected expression. <u>See United States v. Pungitore</u>, 910 F.2d 1084, 1104, n.16 (3d Cir. 1990).

not, for example, believe he was on a job interview with a potential employer. No First Amendment interests are in play here.

Second, at the hearing and in his reply brief, Hsu also argues that the EEA is overbroad because it stifles the free flow of ideas. See Def.'s Omnibus Reply at 8. While we are sympathetic to Hsu's argument, see infra, the Supreme Court has made it clear that "outside the limited First Amendment context, a criminal statute may not be attacked as overbroad." Schall v. Martin, 467 U.S. 253, 268 n.18 (1984); see also United States v. Salerno, 481 U.S. 739, 745 (1987); United States v. Raines, 362 U.S. 17, 21 (1960).

"Related to or included in"

We reject Hsu's argument that the term "related to or included in a product that is produced for or placed in interstate or foreign commerce" is unacceptably vague. The cases he cites in support of his argument are all First Amendment decisions in which the only connection to what is at stake here is the fact that the cases involve the use of the term related.

See Def.'s Mot. at 20-21 (citing First Amendment cases involving "gang related" symbols and "airport related" activities). We believe the term "related to or included in" is readily understandable to one of ordinary intelligence, particularly here where the defendant appears to be well versed as to the relationship (and technological differences) between "first"

generation" and "second generation" taxol technology. <u>See</u>, <u>e.g.</u>, Transcript of Meeting between Hsu and FBI Agent Hartmann, (Feb. 27, 1996), at DOJ232-33 (in which Hsu explains to Agent Hartmann why he is specifically interested in the "tissue culture" technology to make Taxol).

"Reasonable Measures"

Similarly, we also find that the EEA's definition of "trade secret" -- requiring, in part, that the owner take "reasonable measures" to keep such information secret -- is also not for use of that locution void for vaqueness. First, a statute is not void for vagueness merely because it uses the word "reasonable" or "unreasonable". <u>See</u>, <u>e.g.</u>, U.S. Const. amend. IV (prohibiting "unreasonable searches and seizures"); 18 U.S.C. § 922(d)(8) (making it unlawful for any person to sell to, or dispose of, a firearm or ammunition to any person who the seller knows or has "reasonable cause" to believe that such person is engaged in other conduct that would place an intimate partner in "reasonable fear" of bodily injury). 5 In sustaining the antitrust "rule of reason" as sufficiently definite even in a criminal prosecution, Justice Holmes observed, with his customary sensitivity to human frailty, that "the law is full of instances where a man's fate depends on his estimating rightly, that is, as the jury subsequently estimates it, some matter of degree.

^{5.} The jury deciding this case will of course apply the standard of "beyond a reasonable doubt".

his judgment is wrong, not only may he incur a fine or a short imprisonment . . .; he may incur the penalty of death." Nash v. United States, 229 U.S. 373, 377 (1913).

The Government has here pointed out that the definition of "trade secret" is taken, "with only minor modifications", from the definition used in the Uniform Trade Secret Act (UTSA), which has apparently been adopted in forty states and the District of Columbia, and the language has withstood at least one vagueness attack. See Government's Resp. at 33-34; see also People v. Serrata, 62 Cal. App. 3d 9, 133 Cal. Rptr. 144 (Cal. Ct. App. 1976) (upholding the constitutionality of California's criminal trade secret statute and explaining that the term "measures" in the statute is not unconstitutionally vague).

Finally, as applied here, it is clear that Hsu and his alleged co-conspirator, Jessica Chou, were told on several occasions (in e-mails, telephone conversations, and in-person meetings) that the taxol technology in question was proprietary to BMS and Phyton, could not be acquired via a license or joint venture (as the cost would be too high), and that they would have to "get [it] another way", namely, through an allegedly corrupt BMS employee. See, e.g., Transcript of Meeting between Hsu and FBI Agent Hartmann, (Feb. 27, 1996), at DOJ240-41 (in which Agent Hartmann explains that BMS is keeping the taxol technology "close to their chest" and that a license or joint venture would be too expensive, and in which Hsu responds that "[w]e'll get another way"); see also E-mail from FBI Agent Hartmann to Jessica Chou

(Nov. 16, 1995)(in which Agent Hartmann explains that "BMS [has] exercised an exclusive option on Phyton's proprietary plant cell culture technology"). Hsu thus knew that BMS had taken many steps to keep its technology to itself, and therefore he will not be heard to quibble with the ductility of "reasonable measures" as applied to him in this case.

"Generally known to" and "not being readily ascertainable" through proper means by the public

At the outset, the issue of whether "second generation" taxol technology is "generally known to" and not "readily ascertainable" to the public is a question that we (and the parties) have struggled with since the inception of this case. <u>See United States v. Hsu</u>, Crim. No. 97-323-01 , 1999 WL 80952, at *1-*4 (E.D.Pa. Feb. 16, 1999)(explaining the tortuous procedural history of this case). After the June 14, 1997 sting operation at the Four Seasons Hotel, in August, 1997 two BMS scientists, Dr. Nikhil Mehta and Dr. Norman Lacroix, were enlisted by BMS and the Government to review the documents shown to the defendant at the Four Seasons Hotel ("the June 14th documents") and to redact all "confidential" information contained therein. As our February 16, 1999 Memorandum illustrates, even Dr. Mehta and Dr. Lacroix could not agree about what information in the June 14th documents was "confidential" and what information was public. See id. at *2 n.9 (citing twenty-one examples of inconsistencies in the redactions to the June 14th documents).

After an interlocutory appeal in which the Government soothingly assured the Court of Appeals panel that the redactions to the June 14th documents "consist of technical information that constitutes trade secrets under any definition", see Hsu, 155 F.3d at 197-98 n.11, BMS enlisted Dr. Pallaiah Thammana, the Associate Director of Biotechnical Development at BMS, to undertake a complete reevaluation of the redactions to the June 14th documents. After Dr. Thammana's reevaluation of the June 14th documents, over one hundred pages that had previously been redacted by Dr. Mehta and Dr. Lacroix were then unredacted as public information. See Hsu, 1999 WL 80952 at *3 n.11.

Finally, at the urging of our Court of Appeals, we undertook an <u>in camera</u> review of the redactions made to the June 14th documents. While we (perhaps immodestly) consider ourselves of "ordinary" intelligence, after an <u>in camera</u> review of the June 14th documents, in both their newly-redacted and unredacted forms, it became clear to us that "the issue of whether the June 14th documents had been properly redacted to exclude only trade secret information required technical expertise far beyond our capabilities." <u>See id</u>. at *3. Accordingly, with the consent of the parties, we enlisted the assistance of Dr. Kenneth Snader from the National Cancer Institute as our technical advisor to review the June 14th documents in both their redacted and unredacted forms. After his exhaustive analysis, Dr. Snader suggested that we unredact yet another ten pages in the June 14th

documents because they are truly public information. <u>See id</u>. at *6-*9.

At oral argument on the current motion, we asked counsel for the Government to explain how the terms "generally known" and not "readily ascertainable" by the public could be anything but vague in relation to taxol technology, particularly given the ever-shrinking redactions to the June 14th documents against the very same "trade secret" definition. See supra. response, counsel for the Government argued that while it was a difficult undertaking to determine whether the June 14th documents actually contained trade secret information within the meaning of the EEA, ultimately the trade secret status of the June 14th documents did not matter to the outcome of this case because Hsu is charged only with the inchoate offenses of attempt and conspiracy. <u>See</u> 18 U.S.C. § 1832(a)(4), (5). At oral argument, the Government pointed to our Court of Appeals's August, 1998 decision in which the panel made it clear that the Government need not prove at trial that an actual trade secret was used during the investigation, because the defendant's culpability for a charge of attempt depends only on the circumstances as the defendant believes them to be and not as they really are. See Hsu, 155 F.3d at 203-04 (explaining that the defendant can be guilty of attempt and conspiracy to steal trade secrets even if the June 14th documents contained no confidential information at all).

While the Government's position is legally accurate, it is quite troubling in the context of this particular statute. Unlike statutes that prohibit, for example, murder (or attempted murder), bribery (or attempted bribery), or distribution of cocaine (or conspiracy to distribute cocaine), where there is a clearly defined end (e.q., the definitions of murder, bribery, and cocaine are fixed), here, where a "trade secret" is based on intangible and evolving concepts and ideas, and where the definition of a "trade secret" is based, in part, on what is "generally known" or "readily ascertainable" to the public, the analysis is considerably more problematic.

A hypothetical illustrates the difficulty of the Government's argument. Assume Congress passed a statute making it a crime to be "bad" or to "attempt to be bad" and the definition of "bad" was "what people generally know as really bad or evil." On its face, such a statute is palpably and unlawfully vague. Yet as applied to Dr. Hannibal "the cannibal" Lecter (in The Silence of the Lambs), such a statute would not be unconstitutionally vague, as all but the criminally insane would agree that Dr. Lecter is "bad". 6 As applied to Little Mary

^{6.} Theoretically, Dr. Lecter's conviction for the completed offense of badness would be based, in part, on a battle of expert witnesses over what the public "knows" and whether the general public would regard Dr. Lecter as really bad or evil.

Sunshine, however, such a statute would be unconstitutionally vague because no reasonable person would call her morally "bad".

Turning specifically to the EEA, it is in many ways more problematic than our badness statute because, unlike our imagined law, what is "generally known" and "reasonably ascertainable" about ideas, concepts, and technology is constantly evolving in the modern age. With the proliferation of the media of communication on technological subjects, and (still) in so many languages, what is "generally known" or "reasonably ascertainable" to the public at any given time is necessarily never sure.

Furthermore, when the EEA states that the information must be generally known and not readily ascertainable "by the public", to whom does it refer? The "general" public? The "scientific" public? The "commercial" public? The "judicial" public? Prior to this case we had not heard of the cancer drug

^{7.} We hasten to add that we make no judgment as to her taste, however. We do note that if Little Mary Sunshine decided that she wanted to be in her heart bad, and really believed that she was then being bad, she could be prosecuted under our hypothetical statute for attempted badness. At oral argument we posed a similar question to the Assistant United States Attorney (albeit in a hypothetical involving the recipe for an angel food cake), to which he answered that the U.S. Attorney's office would use its discretion and not prosecute such cases. It is precisely this type of prosecutorial discretion, however, that is so unsettling. We are indeed aware of no instance in which a vague statute has been deemed constitutionally safe because we can all rest easy trusting the goodness and wisdom of our prosecutors. See also Amsterdam, supra, at 88 (noting the "intimate connection" between the vaqueness doctrine and the protection of individuals "from arbitrary and discriminatory governmental action"); Kolender, 461 U.S. at 357.

Taxol (and had never heard of the plant cell culture process to produce it) -- does that ignorance in and of itself make taxol technology not "generally known"? If a large quantity of information about taxol technology is available on the Internet and in published journals (which it is), or if those subjects were discussed at scientific conferences abroad (they were), do those realities make it "readily ascertainable"?

While we are thus much troubled by the EEA's vaporous terms, as applied to the facts of this case and this defendant we nevertheless find that the term "generally known to, and not being readily ascertainable through proper means by, the public," 18 U.S.C. § 1839(3), is not unconstitutionally vague. Based upon a careful review of the evidence that the Government will offer at trial, including e-mails, telephone conversations, and tape recordings of in-person meetings, it appears that Hsu knew (or at a minimum believed) that the "second generation" taxol information he was seeking to acquire was not "generally known to" or "readily ascertainable through proper means by, the public." 18 U.S.C. § 1839(3). The e-mails, telephone calls, and conversations show a pattern whereby Hsu, along with his indicted co-conspirator, Jessica Chou, realized that they could not license or acquire the "second generation" taxol technology through legal or public means, and that they would have to acquire it from an allegedly corrupt BMS employee. In several of the conversations Hsu and Chou are unambiguously told that this undertaking is illegal. <u>See</u>, <u>e.g.</u>, Transcript of Meeting between Hsu and FBI Agent Hartmann, (Feb. 27, 1996), at DOJ254 (in which Agent Hartmann explains that they are "talking about maybe even doing something, you know, that is against the law" and Hsu responds, "Right. Right. Right."). Yet, despite these warnings, Hsu and his co-conspirator continued with their pursuit of taxol technology and, on April 22, 1997, Jessica Chou offered undercover FBI Agent John Hartmann (posing as "John Mano") "US\$400,000 which is a combination of cash payment, stock shares and royalties" for the taxol technology. See E-mail from Jessica Chou to FBI Agent John Hartmann a/k/a John Mano (Apr. 22, 1997).

Therefore, as applied to the conduct of this particular defendant and given the fact that he is charged <u>only</u> with the inchoate offenses of attempt and conspiracy (rather than completed offenses), we put aside our considerable disquiet about the EEA's language and deny defendant's motion to dismiss Counts Ten and Eleven of the Indictment.⁸

An Order follows.

^{8.} We take some solace from our recognition of an aspect of the EEA that the Government did not mention in its papers or in oral argument. To be convicted under the EEA, a defendant must "knowingly" set out to violate the statute. See 18 U.S.C. § 1832(a). Therefore, a person who takes a "trade secret" because of ignorance, mistake, or accident should not be successfully prosecuted.

IN THE UNITED STATES DISTRICT COURT FOR THE EASTERN DISTRICT OF PENNSYLVANIA

UNITED STATES OF AMERICA : CRIMINAL ACTION

:

v.

•

KAI-LO HSU : NO. 97-323-01

ORDER

AND NOW, this 11th day of March, 1999, upon consideration of defendant's omnibus motion to dismiss Count's Ten and Eleven of the Indictment, and the Government's omnibus response thereto, and after a hearing on the motion on March 8, 1999, and for the reasons stated in the Memorandum attached hereto, it is hereby ORDERED that defendant's omnibus motion to dismiss Counts Ten and Eleven of the Indictment is DENIED.

BY THE COURT:

Charact Dallasli T

Stewart Dalzell, J.