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# CRIMINAL PROSECUTIONS OF TRADE SECRET THEFT:

# THE EMERGENCE OF THE ECONOMIC ESPIONAGE ACT

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*"[The EEA] will protect the trade secrets of all businesses operating in the United States, foreign and domestic alike, from economic espionage and trade secret theft and deter and punish those who would intrude into, damage or steal from computer networks.*[1]

## I. Introduction

Theft of corporate trade secrets has become widespread and disastrous. Today's misappropriators have greater access to company proprietary information due to the advent of the Internet and office network systems. Technological advances have had a dichotomous effect. While transmitting information instantaneously and advertising on line has indispensable cost benefits to businesses, it has also had a detrimental effect on the security of business transactions. In fact, by 1996, nearly $24 billion of corporate intellectual property was being stolen every year,[2] a number that will escalate dramatically in the year 2000. Ostensibly, misappropriation of trade secrets can do more harm to a modern business than an arsonist's torch to a nineteenth century industrial factory.[3]

## II. Background

### A. Ineffectiveness of Trade Secret Laws Prior to 1996

Policing trade secret violators has proven to be an arduous task for both private corporations and the United States Government. Prior to 1996, prosecution of trade secret cases were hamstrung by nebulous federal trade secret laws. Relying on a panoply of statutes, written without a

sophisticated understanding of modern business, private industrial espionage went unpunished. The Government generally pursued prosecutions for violations of trade secret theft, under the National Stolen Property Act, ("NSPA"), passed in 1994.[4] However, the NSPA proved ineffective in combating the unique problems facing intellectual property due to its exclusive application to physical takings. The statute ultimately failed because it did not provide a viable mechanism for securing convictions based on misappropriation of intangibles, specifically, intellectual property. Furthermore, several courts questioned whether the NSPA was even applicable to the type of information involved in modern schemes of corporate espionage.[5]

In another attempt to secure a viable method of prosecuting trade secret misappropriators, the government used the federal mail and wire fraud statutes[6]. However, theft of corporate proprietary information often does not involve the use of the mails or wires. Therefore, this too proved to be an ineffective means of prosecuting misappropriation cases.

The only legislation enacted to expressly punish trade secret violators was the Trade Secrets Act ("TSA"). The TSA prohibited the unauthorized disclosure of confidential government information, including trade secrets, by a government employee.[7] The TSA was of little value, however, due to its inadequate deterring effect in assessing only misdemeanor penalties for offenders.[8] Another glaring deficiency demonstrated in the TSA was its limited application to governmental employees.[9]

Attempts to combat trade secret misappropriation at the state level have been unsuccessful as well. Lack of available resources and lack of jurisdiction over out-of-state violators were two significant impediments facing state prosecutors.[10] Without alleviating these obstacles, state prosecutors were unable to take full advantage of the laws designed to punish misappropriators.

### B. A Call For Reform

The ineffectiveness of existing statutes became acutely apparent in 1996. Against the backdrop of increasing threats to corporate security and a rising tide of international and domestic espionage, Congress, the President, and legal commentators all recognized the failure of prosecutions under existing statutes and the need for modern criminal trade secret legislation[11]. A 1996 House report suggested developing a "systematic approach to the problem of economic espionage."[12] In response, the House and Senate drafted and passed the Economic Espionage Act ("EEA").

On October 11, 1996, President Clinton signed the EEA into law.[13] The President said of the EEA, "[t]his act will protect the trade secrets of all businesses operating in the United States, foreign and domestic alike, from economic espionage and trade secret theft and deter and punish those who would intrude into, damage or steal from computer networks."[14]

## III. The Economic Espionage Act

### A. Pertinent Provisions

Reflecting the President's comments, the EEA was enacted under Title 18 of the United States Code, criminalizing foreign and domestic espionage. There are nine provisions included in the EEA which protect proprietary information from misappropriation[15]. Specifically, there are two separate provisions which criminalize trade secret misappropriation. Section 1831outlines the offense of "economic espionage" which arises only when the theft benefits a foreign government, entity or agent.[16] Section 1832 applies to all trade secret misappropriation, regardless of who benefits.[17] Congress' primary intent in promulgating the EEA was to prohibit theft of American

trade secrets by foreign corporations.[18] To date, however, there have been no prosecutions under §1831, the foreign government provision.[19] Instead, prosecutors have used §1832 exclusively, which because of its breadth, has more practical application.[20]

Section1832 is a general, principally domestic, criminal trade secrets provision. It is designed to punish,

> [whoever], with intent to convert a trade secret, that is related to or included in a product that is produced for or placed in interstate or foreign commerce, to the economic benefit of anyone other than the owner thereof, and intending or knowing that the offense will, injure any owner of the trade secret.[21]

The elements of §1832 are as follows: the defendant must a) intend to convert a trade secret to the economic benefit of anyone other than the owner ; [22] b) intend or know "to a practical certainty" that the offense will injure an owner of the trade secret;[23] and c) intend that the trade secret be "related to or included in a product that is produced for or placed in interstate or foreign commerce."[24]

**B. Trade Secrets Defined**

The definition of "trade secrets" is embodied in Title 18 U.S.C. §1839 and is expressly intended to include intangible forms of information. Section 1839 includes:

> . . . all 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 reasonable measures 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.[25]

Although similar to the Uniform Trade Secrets Act[26] definition, the EEA defines trade secrets more broadly than any other federal or state statute.[27] Specifically, the EEA protects a wider variety of technological and intangible information[28]. It is the first piece of legislation to expressly protect intangible property without additional requirements, such as use of the mails or wires.[29] On its face, the EEA was intended to be "another arrow to the quiver for federal prosecutors dealing with [these] trade secret cases."[30]

### C. Mens Rea

Specific intent and proof of the means of misappropriation are both required in order to maintain a cause of action under the EEA. Section 1832 applies to "whoever" intends to convert a trade secret, intends or knows that the offense will "injure any owner of that trade secret, and acts knowingly in his or her misappropriation of the proprietary information."[31]

The government meets its burden in establishing the defendant's criminal intent by proving three elements. First, the defendant must intend to convert a trade secret. It is not enough that the defendant intended to steal non-proprietary information. If the information being appropriated does not satisfy the statutory requirements for establishing the existence of a trade secret, this initial element will not be satisfied.

Next, the defendant must have known or intended that the misappropriation would injure any owner of the trade secret. This requires the government to prove that the defendant knew or was aware to a practical certainty that his or her conduct would cause some disadvantage to the rightful owner.[32] It does not require that the government prove that the defendant acted with malice or evil intent.[33]

Finally, the government must prove that the defendant knowingly misappropriated a trade secret.[34] This element is satisfied when evidence indicates that the defendant knew or had a firm belief that the information he or she was taking was proprietary.[35] Actual knowledge or substantial certainty as to the misappropriation of a trade secret is sufficient to prove this element.[36] Sufficient knowledge under this provision is not satisfied by ignorance, mistake or accident.[37]

**D. Penalties**

Violations of §1832 by individuals results in prison sentences of up to ten years and, or fines not exceeding $250,000.[38] Organizations can be fined up to $5 million.[39] In contrast, violations of §1831 are more severe. Individuals can be imprisoned for fifteen years and, or fined $500,000, and organizations can be fined a maximum of $10 million.[40] Fines and imprisonment are subject to the U.S. Sentencing Guidelines, which dictate an appropriate range of penalties.

A criminal forfeiture provision is also embodied in 18 U.S.C. §1834, and is applicable to both §§1831 and 1832. Specifically, "a person shall forfeit any property constituting, or derived from, the proceeds of an EEA crime."[41] The sentencing court may, in its discretion, require the defendant to forfeit "any property used, or intended to be used, to commit or facilitate an EEA offense."[42] The Attorney General also has discretion to enjoin violations of the EEA in a civil action.[43]

**E. Applicability**

The EEA applies to extraterritorial criminal activity as well. Section 1837 provides that the EEA applies to conduct outside the United States if: (1) the offender is (a) a natural person who is a citizen or permanent resident of the United States, or (b) an entity organized under United States or state laws, or a political subdivision thereof; or (2) an act in furtherance of the offense was

committed in the United States.[44] This provision is designed to expand the jurisdiction of trade secret prosecutions to reflect and accommodate global activity of modern businesses.

### F. EEA Limitations

Despite the political fervor surrounding the EEA, it has been less than eventful. As of March 1999, there have only been eleven EEA prosecutions.[45] The reasons for the conservative use of the EEA are twofold.

First, despite the breadth of the EEA, Congress was primarily concerned about stifling competition. The court in *United States v. Hsu* stated that "Congress did not intend the definition of a trade secret to be so broad as to prohibit lawful competition, such as the use of general skills or parallel development of a similar product."[46] In drafting the EEA, Congress was concerned about indicting employees who are hired by competitors and utilize intangible, common job experiences for the benefit of the hiring company. To foreclose the possibility of this, Congress intended a delicate balance.

Second, the Justice Department has imposed a requirement on all EEA prosecutions that for the first five years of its enforcement each case must be approved by the Attorney General, the Deputy Attorney General, or the Assistant Attorney General for the Criminal Division. [47] Any unauthorized prosecutions under the Act, the Attorney General warned, are to be reported to the Senate Judiciary Committee and may result in sanctions.[48]

## IV. Legal Issues in EEA Prosecutions

With so few EEA decisions, defense counsel and prosecutors should be aware of the prominent legal issues a criminal misappropriation case presents.

### A. Tension Between Section 1835 of the EEA and Rules of Criminal Procedure

There is an inherent tension between §1835 of the EEA and Federal Rule of Criminal Procedure 16(a)(1)(C). 18 U.S.C. §1835 provides, in pertinent part, that a court:

> shall enter such orders and take such other action as may be necessary and appropriate to preserve the confidentiality of trade secrets, consistent with the requirement of the Federal Rules of Criminal Procedure, the Federal Rules of Evidence, and all other applicable laws. An interlocutory appeal by the United States shall lie from a decision or order of a district court authorizing or directing the disclosure of any trade secret.[49]

This section is designed to protect the confidential trade secret from falling into the hands of the defendant being charged with its theft. While this section does not abrogate constitutional and statutory protections, it does represent Congress' clear intent that trade secrets are to be protected to the fullest extent during EEA litigation.[50] Moreover, "it encourages enforcement actions by protecting owners who might otherwise be reluctant to cooperate in prosecutions for fear of further exposing their trade secrets to public view, thus further devaluing or even destroying their work"[51]. This confidentiality provision aims to balance the interests of protecting confidential information and the unique considerations inherent in criminal prosecutions.[52] The latter consideration specifically applies to Federal Rule of Criminal Procedure 16(a)(1)(c), which permits the defendant to discover proprietary documents which are material to the preparation of his or her case. The rule reads:

> **Documents and tangible objects**. Upon request of the defendant the government shall permit the defendant to inspect and copy or photograph books, papers, documents, photographs, tangible objects, buildings or places, or copies or portions thereof, which are within the possession, custody or control of the government, and which are material to the preparation of the defendant's defense or are intended for use by the government as evidence in chief at the trial, or were obtained from or belong to the defendant.[53]

This Rule frustrates the intent and purpose of the EEA because it requires the government

to provide the defendant with the evidence it plans to use at trial. If the government complies with the rule, the defendant will inevitably discover proprietary information. If the defendant is denied access to the government's proof, then the defendant's Sixth Amendment right to a fair trial and Fifth Amendment right to due process are implicated.

This was the central issue in the *Hsu* case. [54] After a two year investigation, the FBI arrested Kai-Lo Hsu, a technical director for a Taiwanese corporation, and Chester S. Ho, a biochemist and professor at a Taiwanese university, for attempting to steal the formula for taxol, an anti-cancer drug manufactured by the Bristol-Myers Squibb Corporation.[55] The defendants allegedly offered $400,000 to Bristol-Myers executives posing as corrupt scientists in exchange for the formula for taxol. The defendants were charged with attempting to steal, and conspiring to steal, trade secrets under §§1832(a)(4) and (a)(5)[56].

The *Hsu* defendants moved for disclosure of the government's evidence of a "trade secret." The defendants asserted that the information was necessary to their defense of legal impossibility[57]. The district court, citing due process and fair trial guarantees of the Fifth and Sixth Amendments**,** ordered the government to disclose the trade secret documentation. The government exercised its right to an interlocutory appeal[58].

The Third Circuit Court of Appeals reversed. The Court first noted that it was not necessary for the district court to determine whether failure to disclose the trade secret would undermine the constitutional rights of defendants charged with a completed offense under the Act[59]. Distinguishing between completed acts of trade secret theft and attempted and conspiratorial trade secret allegations, this Court concluded that its job was limited to determining whether the defendants were entitled to the information for the purpose of defending against the attempt and

conspiracy portions of the EEA[60]. Specifically, if the legal impossibility defense was not cognizable, then the existence of an actual trade secret was of no consequence to the conspiracy and attempt charges[61].

Finding that Congress did not intend to allow legal impossibility as a defense to attempt crimes created by the EEA's terms, the Third Circuit held that the government could prove its case of attempt and conspiracy without determining whether the information sought actually qualified as a trade secret.[62] A defendant's culpability for a charge of attempt or conspiracy under § 1832(a) does not require proof of the existence of an actual trade secret. The government meets its burden by establishing that a defendant sought to acquire information which they believed to be a trade secret .[63] It is immaterial whether the information actually qualified as such.[64] However, in the event that confidential information becomes relevant to the presentation of a viable defense, the courts must properly balance in camera a defendant's constitutional right to material information against the statutory requirement of confidential preservation.[65]

**B. EEA's Susceptibility to a Constitutionally Vague Challenge**

The EEA's broad definition of trade secret lends itself to a constitutional challenge for vagueness. [66] The *Hsu* defendants moved to dismiss certain counts of the indictment on the these grounds.[67] Specifically, the defendants argued that the terms "generally known" and "reasonably ascertainable" included in §1839, were unconstitutional as applied to intangible information .[68] Although the court denied defendants claim, it expressed concern about the EEA's constitutionality. In dicta, the court wrote:

> [W]hat 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.[69]

The court held that outside the confines of the First Amendment, a void for vagueness challenge must be unconstitutional as applied to the particular defendant.[70] In this case, the defendants were charged with inchoate crimes, and were explicitly informed of the illegality of their actions. Finding the requisite degree of culpability, the constitutional challenge as applied to the *Hsu* defendants was denied.[71]

### C. Defense Strategies in the Face of an EEA Charge

A company faced with possible criminal sanctions for an EEA violation has several options in mitigating its exposure to liability. These options are in addition to the standard criminal defenses regarding deficiencies in the requisite mens rea.

The most obvious defense is to assert that the information under investigation is not a trade secret as defined by the Act, because it lacks the element of secrecy.[72] If the company under investigation obtained the information as a result of the original owner's failure to properly protect its proprietary nature, then the information does not qualify as a trade secret. The extent of security measures taken by the owner of the trade secret must be reasonable under the circumstances, depending on the facts of each specific case.[73] If the owner cannot meet this burden, then no violation for misappropriation exists.

Characterization of the information as "soft" business competitive information rather than "hard" scientific or technical data is another valid defense when faced with potential criminal prosecution under the EEA. The Department of Justice is less likely to pursue claims for misappropriation of trade secrets if the information is construed as "soft".[74]

The EEA does not punish a person for legally "discovering" the elements of a trade secret.[75]

This process is referred to as "reverse engineering." While the EEA does not specifically address the viability of this defense, legislative history suggests it too may present an legitimate argument for corporations faced with the dilemma of defending an EEA case.[76] A key issue in reverse engineering cases is whether improper means were used to acquire access to the trade secret.[77]

The economic value of the information may also be relevant in establishing a defense. [78] Economic value is one of the requisite elements of the Act.[79] The trade secret must derive "independent economic value . . . from not being generally known to . . . the public."[80]

Finally, the application of lesser penalties is another means of mitigating liability under the EEA In this case, appropriate lesser penalties may include an injunction or civil damages, rather than the harsh criminal sanctions expressed in the Act.[81] The Act, however, specifically states that it does not preempt or replace other valid civil or criminal remedies.[82]

## V. Preventative Measures

To ensure conformity with the EEA's guidelines, corporations should implement preventative programs and policies. When employees are hired from a competitor corporation, particular attention is required. [83] A corporation should immediately begin taking action to remedy a possible violation of trade secret law at the moment it is discovered. An important step in deterring and avoiding illegal conduct involves ensuring that the corporation does not benefit, even remotely, from the improperly disclosed information.

Recently, the Justice Department set forth eight factors it determined were relevant in evaluating a case against a corporate target[84]. The Justice Department noted that the unique nature of a corporation requires that these additional factors be considered when prosecutorial investigations are conducted and decisions are made regarding the proper treatment of a corporate

target.[85] These factors include:

> (1) the nature and seriousness of the offense, including the risk of harm to the public, and applicable policies and priorities, if any, governing the prosecution of corporations for particular categories of crime;
>
> (2) the pervasiveness of wrongdoing within the corporation, including the complicity in, or condonation of, the wrongdoing by corporate management;
>
> (3) the corporation's history of similar conduct, including prior criminal civil, and regulatory enforcement actions against it;
>
> (4) the corporation's timely and voluntary disclosure of wrongdoing and its willingness to cooperate in the investigation of its agents, including, if necessary, the waiver of the corporate attorney-client and work product privileges;
>
> (5) the existence of adequacy of the corporation's compliance program;
>
> (6) the corporation's remedial actions, including any efforts to implement an effective corporate compliance program or to improve an existing one, to replace responsible management, to discipline or terminate wrongdoers, to pay restitution, and to cooperate with the relevant government agencies;
>
> (7) collateral consequences, including disproportionate harm to shareholders and employees not proven personally culpable; and
>
> (8) the adequacy of non-criminal remedies, such as civil or regulatory enforcement actions.[86]

In addition to these suggestions, the Federal Sentencing Guidelines provide useful recommendations for corporations implementing preventative measures in an attempt to preempt EEA violations. These guidelines expand on the compliance factor suggested by the Justice Department[87]. Although following the guidelines will generally only reduce corporate sanctions rather than absolve the corporation of liability, the detailed preventative measures that a corporation may utilize in securing compliance with the law will be beneficial in any government evaluation of whether to proceed with prosecution. Regarding federal trade secret provisions,

companies should:

> (1) make it clear that policy strictly prohibit the possession or use of trade secrets, and implement standards and procedure to minimize the risk of criminal conduct,
>
> (2) vest a senior corporate executive with responsibility for compliance,
>
> (3) reduce employee discretion in such matters to a minimum by providing clear guidance and a specific person that employees can consult with on any trade secret questions,
>
> (4) make employees aware of the specific requirements of the EEA through new employee orientation, training programs, and continuing education programs,
>
> (5) implement programs to detect misappropriations by employees, including a confidential hotline where violations may be reported,
>
> (6) enforce the standards that are implemented and discipline violators, and
>
> (7) when a violation does occur, the company should take all necessary remedial actions and take steps to ensure that future similar violations do not occur.[88]

## V. Practical Considerations -- Pursuing Civil or Criminal Remedies

In representing a corporation or individual victimized by the misappropriation of its trade secrets, counsel may pursue civil relief that parallels the government's prosecution. Assuming the government will aggressively pursue a criminal case, and have no opposition to the civil proceeding, the benefits may be significant. First, the vast resources and powerful investigatory tools of the government will likely produce a more thorough probe than a private one. Second, the government's budget will generally exceed a privately funded investigation. Third, potential criminal penalties have a more effective means of forcing a early resolution. Finally, a criminal conviction will inevitably lead to a favorable civil resolution.

On the other hand, if the government opposes a parallel civil suit, but counsel in the civil

action elects to proceed, the government will likely seek a stay of the civil action to prevent key witnesses, who may be given immunity by the government, from being deposed by the defense. [89] The government will generally be skeptical of corporations who attempt to use the criminal case as a threat to increase the value of the civil case. As David Green of Justice Department said, while the Department will evaluate each case individually, "[t]he Justice Department will be concerned about whether it is being used as the big bully in a civil dispute . . ."

As its record reflects, the government will only pursue the most egregious cases. However, since the defense in a civil case will always be cautious about government involvement, the net effect may be the same. Mere suggestions about the criminal statute, along the subtle references to government issues, may produce Fifth Amendment assertions, and adverse inference[90] instructions. On the other hand, it may produce a civil stay pending any criminal prosecution.

## V. Conclusion

The statute is new and evolving. Although fraught with legal issues, with the advent of computers, the Internet, and other technological advances, the new millennium may produce a more active docket of trade secret cases.

## ENDNOTES

1. *See* Joseph I. Rosenbaum, *Economic Espionage Act: Friend or Foe; Has the Law Been Effective? The Jury is Still Out,* N.Y.L.J., Feb. 16, 1999 (quoting President Clinton).

2. *See United States v. Hsu*, 155 F. 3d 189, 194 (3d Cir. 1998) (citing, Richard J. Heffernan & Dan T. Swartwood, *Trends in Intellectual Property Loss* 4, 15) (1996)).

3. *See* S. Rep. No. 104-359, at 7 (1996).

4. The National Stolen Property Act, ("NSPA"), 18 U.S.C. § 2314 (1994), was passed "to fight the 'roving criminal' whose access to automobiles made it easy to move stolen property across state lines." *See e.g.* Keith D. Krakaur & Robert C. Juman, *Two New Federal Offenses Help Battle Corporate Espionage*, 4 No. 2 Bus. Crimes Bull.: Compliance & Litig. 7, 7 (1997).

5. *See Hsu,* 155 F.3d at 195, n. 6 (citing *Dowling v. United States*, 473 U.S. 207, 216 (1985)(stating "that the NSPA seems to clearly contemplate a physical identity between the items unlawfully obtained and those eventually transported, and hence some prior physical taking of the subject goods"); *United States v. Brown*, 925 F. 2d 1301, 1307-08 (10th Cir.1991)( holding "that the theft of purely intellectual property is not punishable by the NSPA because it is not physical property within the meaning of the statute).

6. *See* 18 U.S.C. §§1341, 1343 (1994).

7. *See* 18 U.S.C. §1905 (1994). *See e.g. United States v. Wallington,* 889 F.2d 573 (5th Cir. 1989) (upholding a TSA conviction for running background checks on individuals the defendant's friend suspected of trafficking in narcotics).

8. *See* Randy Gidseg, Bridget Santorelli, Elizabeth Walsh, & Greg Wells, *Intellectual Property Crimes,* 36 Am. Crim. L. Rev. 835, 845, n. 66 (1999) (indicating that the TSA has not been used to prosecute unauthorized disclosures due to its ineffective deterring measures).

9. *See Hsu*, 155 F. 3d at 194, n. 5 (noting that the TSA is aimed at curtailing the unauthorized disclosure of confidential government information, including trade secrets, by a government employee).

10. As of 1996, at least twenty-four states had criminal statutes directed at the theft of trade secrets, and forty-four states and the District of Columbia had adopted some form of the Uniform Trade Secrets Act, which permits civil actions to enjoin and obtain damages for actual and attempted misappropriation of trade secrets. *See id.* at 195 (citing, James H.A. Pooley, et al., *Understanding the Economic Espionage Act of 1996*, 5 Tex. Intell. Prop. L.J. 177, 186) (1997).

11. *See Hsu,* 155 F.3d at 194 (noting that the end of the Cold War sent former government spies running to private practice to perform illicit work for businesses and corporations, thereby, enforcing the need to enact the EEA in 1996).

12. *See* H. Rep. No. 104-788, at 7 (1996), reprinted in 1996 U.S.C.C.A.N. 4021, 4025.

13. *See Hsu*, 155 F. 3d at 195.

14. *See* Rosenbaum, *supra* note 1.

15. *See Hsu,* 155 F.3d at 195.

16. *See* 18 U.S.C.A. §1831 (West Supp. 1998).

17. *See* 18 U.S.C.A. § 1832 (West Supp. 1998).

18. *See* Gerald J. Mossinghoff et at., *The Economic Espionage Act: A New Federal Regime of Trade Secret Protection*, 79 J. Pat. & Trademark Off. Soc'y 191, 191-195 (1997)(discussing reasons for enactment of the EEA).

19. Section 1831 punishes those who knowingly misappropriate, or attempt or conspire to misappropriate, trade secrets with the intent or knowledge that their offense will benefit a foreign government, foreign instrumentality or agent.

20. While § 1831 focuses on who is benefitting from the misappropriation and is exclusively limited to acts which benefit foreign governments, entities or agents, § 1832 is much broader. Section 1832 applies to foreign and domestic commercial trade secret misappropriation and does not require any specific government, entity or person to benefit from the illegal conduct.

21. *See Hsu*, 155 F. 3d at 195-96 (indicating that prosecutions under §1832 are unique in that they require that the defendant intend to confer an economic benefit on the defendant or another person or entity).

22. *See id.* at 196.

23. *See id.*

24. *See id.*

25. *See* 18 U.S.C.A. § 1839(3) (West Supp. 1998).

26. *See Hsu,* 155 F.3d at 196, & 196, n. 10 (noting that the UTSA is a model ordinance which permits civil actions for the misappropriation of trade secrets).

27. The EEA definition of trade secrets is broader than the Uniform Trade Secrets Act, in that Congress "has more explicitly listed a variety of types of information, and means for storage of information . . . to keep pace with growing technology, especially in the computer and information storage sectors. *See* Derek Mason, Gerald J. Mossinghoff, & David A. Oblon, *The Economic Espionage Act: Federal Protection for Corporate Trade Secrets*, The Computer Law., March 1999, at 14. *See also*, Victoria A. Cundiff, *The Economic Espionage Act and You*, 490 PLI/Pat. 9, 27 (1997).

28. *See Hsu,* 155 F.3d at 196.

29. *See* Randy Gidseg, *supra* note 8, at 838.

30. Roundtable Discussion, Arthur J. Schwab, Wayne C. Jaeschke, Lawrence J. McCabe, John K. Williamson, Richard J. Munsch, Michael J. Hershman, David E. Green, *Protecting Trade Secrets Requires Many Approaches -- Economic Espionage Act -- A New Tool in War on Intelligence Theft*, Corp. Legal Times, October 1998.

31. *See* 18 U.S.C.A. § 1832 (West Supp. 1998).

32. *See* H.R. Rep. No. 104-788, at 7 (1996).

33. *See id*.

34. *See* 18 U.S.C.A. § 1832(a) (West Supp. 1998).

35. *See* 142 Cong. Rec. at S12213 (daily ed. Oct. 2, 1996).

36. *See id*.

37. *See id.*

38. *See* 18 U.S.C.A. § 1832 (West Supp. 1998).

39. *See id.*

40. *See* 18 U.S.C.A. § 1831 (West Supp. 1998).

41. *See* 18 U.S.C.A. § 1834 (West Supp. 1998).

42. *See id.*

43. *See* 18 U.S.C.A. § 1836(a) (West Supp. 1998).

44. *See* 18 U.S.C.A. § 1837 (West Supp. 1998).

45. *See* Mason, *supra* note 27.

46. *See Hsu*, 155 F. 3d at 196-97 (citing 142 Cong. Rec. S12, 213 (daily ed. Oct. 2, 1996) (Managers' Statement)).

47. *See id*. at 194, n. 4 (noting that EEA prosecutions will likely remain infrequent in the future because of the Attorney General's pledge not to pursue charges under the EEA without the approval of the Attorney General, Deputy Attorney General, or Assistant Deputy Attorney General until October 2001).

48. *See id.*

49. *See* 18 U.S.C.A. § 1835 (West Supp. 1998)

50. *See Hsu,* 155 F.3d at 197.

51. *See id.*

52. *See id.*

53. *See* Fed. R. Crim. P. 16(a)(1)(c).

54. *See Hsu*, 155 F. 3d at 191, & 197-98.

55. Although the defendants were foreign nationals, they were charged under the principally domestic provision of the EEA, §1832. An arrest warrant issued for Jessica Chan, who is now believed to be in Taiwan. Taiwan does not have an extradition treaty with the United States.

56. *See Hsu,* 155 F.3d at 197.

57. *See id.* at191. The defendants had asserted legal impossibility as a defense because they believed that the documents used at the sting operation meeting, which purported to include the formula for taxol, did not constitute trade secrets. The *Hsu* decision was cited by an Ohio district court in *United States v. Yang*, Criminal No. 1: 97MG0109 (N.D. Ohio, September 4, 1997) which held that: 1) legal impossibility was not a defense to § 1832 EEA prosecutions; and 2) proof of an actual trade secret is not required to prosecute charges of attempt and conspiracy to steal trade secrets.

58. *See id.* at 194. The EEA provides for an interlocutory appeal from a decision or order of a district court authorizing or directing the disclosure of a trade secret pursuant to 18 U.S.C. §1835.

59. *See id.* at 197.

60. *See id.* at 197.

61. *See id.* at 198.

62. *See id.* at 198.

63. *See id.* at 198, 200.

64. *See id.* at 203.

65. *See id* at 205-06. (noting that §1835 nonetheless contemplates the discovery process and in accordance with the rules of discovery this Court would expect the district court to do an in camera review to determine whether the documents have been properly redacted to exclude only confidential information and to assess whether what was redacted was "material" to the defense).

66. Although the overbreath argument is the most appropriate, outside the limited First Amendment context, a criminal statute may not be attacked on this basis. *See e.g. 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).

67. Due to the nature of the interlocutory appeals in this case, there were several opinions issued on various topics. *See e.g. United States v. Hsu*, 40 F. Supp. 2d 623 (E.D. Penn. 1999) (addressing the issue of whether the EEA is constitutionally vague); *United States v. Hsu,* 185 F.R.D. 192, 193 (1999) (addressing whether (1) the redacted information in the documents should be disclosed to the defendants because of their materiality to the case, and (2) whether the documents have been properly redacted to exclude only confidential information).

68. *See id.* at 630.

69. *See id.*

70. *See id*. at 627. (citing *United States v. Mazurie*, 419 U.S. 544, 550 (1975); *United States v. Pungitore*, 910 F. 2d 1084, 1104 (3d Cir. 1990).

71. *See id.* at 631.

72. *See* 18 U.S.C.A. § 1839 (West Supp. 1998).

73. *See Pioneer Hi-Bred Int'l v. Holden Found Seeds,* 35 F.3d 1226, 1235 (8th Cir. 1994).

74. *See* Joseph Savage, Jr. & John Bauer, *The Next War? Federal Prosecutors Focus on Intellectual Property Crimes,* 41 Boston B. J. 6 (1997).

75. *See Kewanee Oil Co. v. Bicron Corp.,* 416 U.S. 470, 476 (1974).

76. *See* 142 Cong. Rec. S12201 (daily ed. Oct. 2, 1996) (suggesting that the important focal point should be on whether the accused has in fact committed an act prohibited by the statute or whether he or she has merely utilized reverse engineering).

77. *See Telerate Sys. Inc. v. Caro,* 689 F. Supp. 221, 232 (S.D.N.Y. 1988).

78. *See* Savage, *supra* note 74.

79. *See* 18 U.S.C.A. §1839(B) (West Supp. 1998).

80. *See* 18 U.S.C.A. §1839(3)(B) (West Supp. 1998).

81. *See* 18 U.S.C.A. §1836(a) (West Supp. 1998).

82. *See* 18 U.S.C.A. § 1838 (West Supp. 1998).

83. *See e.g. Dow Sues GE, Claims Secretes Pirated*, Hous. Chron., Apr. 2, 1997, at B4. Though a civil case, in 1997, Dow Chemical filed suit against General Electric alleging that GE engaged in systematic campaign to target and recruit 14 Dow employees who possessed Dow trade secrets.

84. *See Justice Department Guidance on Prosecutions of Corporations,* [Dec.] Criminal Law Reporter (BNA) No. 10, at 189-95 (Dec. 8, 1999)

85. *See id.* at 190.

86. *See id.*

87. *See id.* Specifically, the Federal Sentencing Guidelines address factor five in the Department of Justice's list of suggestions.

88. *See* Federal Sentencing Guidelines §8A1.2(k)(1)-(7) (1998).

89. *See United States v. Pin Yen Yang,* 74 F. Supp. 2d 724 (N.D. Ohio 1999).

90. *See Baxter v. Palmigiano,* 425 U.S. 308, 316-21 (1976); *F.D.I.C. v. Fidelity & Deposit Co.,* 45 F.3d 969 (5th Cir. 1995).