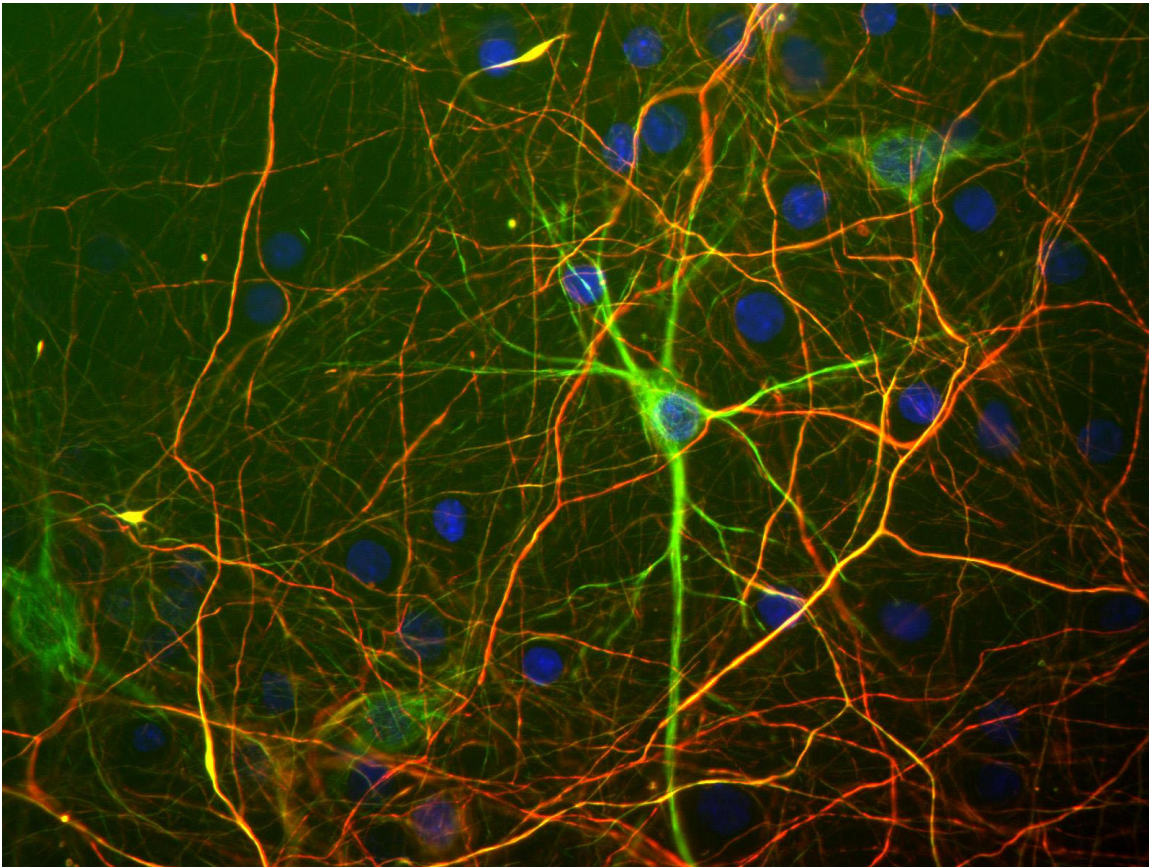


Protecting Brainwaves Considering Signal Intelligence Technology Advances

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Abstract: ““This article aims to demonstrate and explore the avenues for protection of brainwaves of ideas in relation to advances in surveillance technology, more specifically signal intelligence technology, via three sections:

1. Describing the advances in signal intelligence technology today and its relevance to brainwaves. Also discussed is the anatomical description of brainwaves.

2. Then, we build on the basis that these technologies exist and the need to seek legal protection from them. Various electronic communication law and

human right laws including cases are introduced.

3. The last part deals with both transnational law with the steps the European Union (E.U.) has taken to offer protection under international law, both as an intellectual property and human rights issue.

Section one is split into two parts. In the first part; the article explains the advances in electronic signal intelligence technology including U.S. patented electromagnetic devices which are designed to read, alter, and even attack brainwaves. Important scientific proof of reading brainwaves and the mind by reconstructing thoughts "word for word" from various research institutions as well as using Wireless Electroencephalography (EEG) which have demonstrated similar to "iBrain" product is presented to provide the basis for the rest of the article. Some of the dangers and capabilities of these devices are stated by the facts. In the second part; the article explains an anatomical views of brainwaves in the case that they cannot be viewed as electronic communications but viewed as the heart for example despite the advances in signal intelligence technology. Theoretical discussions by various authorities and scholars are presented. An introduction to the various human rights legislature which have been introduced in the past is also stated and Direct Energy Weapons (DEW) as well as Active Denial Systems (ADS) are explained. We also go various electromagnetic brain frequencies emitted which can explain states of mind including the Schumann Resonance (7.83 Hz) phenomenon when your brainwaves

are one with the earth's electromagnetic spectrum eminences.

Section two deals with protecting our rights in relation to intellectual property and human rights and is divided into two scenarios. Under the first scenario; we focus in on protecting brainwaves given the two scenarios above being viewed as "electronic communications" and "data" given that there is consent or judicial sanction. In this scenario, the article reviews the relevant case law such in the U.S. for limits on warrantless surveillance where intellectual property rights are taken away including the defense related provisions such as the Patriot Act (2001). In addition to intellectual property laws, classic cases on electronic surveillance for practical purposes such as discovery and subpoenas such as *Katz v. United States* (1935) are discussed in relevance with the electromagnetic technologies of today. An analysis of existing laws such as the Electronic Communications Protection Act (ECPA) including the need for reforms on the lines of the Public Act 256 of 2003 in Michigan which has expressly banned electromagnetic devices for harmful uses is conducted. Under the second scenario; protection of brainwaves are discussed as a human rights issue and the various U.S. human rights legislation is brought up such as the Torture Victim Protection Act (TVPA) in addition to international legislation the U.S. is bound by and relatively new cases on this subject such as *James Walbert v. Jerimiah Redford* (2008) which is the first case in U.S. history to recognize electromagnetic weapons being used against a person.

Section three is also divided into two parts and focuses on international law

and transnational law on protecting brainwaves in as both “electronic communications” and “data” as well as examining the issue from a human rights perspective. First; European Union law is introduced with issued Regulations and Directives which have banned surveillance on “biometric” and “genetic data” which is applicable to brainwaves. In the second part dealing with international law; we discuss to protect intellectual property of brainwaves through customary international law such as the “International Bill for Human Rights”, various United Nations (U.N.) Conventions, and options available for seeking remedy. The role of the World Intellectual Property Organization (WIPO) is discussed and we also explore the need for drafting a separate U.N. Convention for this purpose with reference to the utilitarian-pragmatic argument considering the philosophy of thought in society.

The article is concluded by stating that we have long ways to go in protecting our brainwaves due to technological advances in signal intelligence although we have gotten off to a fair start in the U.S., E.U., and internationally.

Introduction

The World Intellectual Property Organization (WIPO) defines “intellectual property” as:

“creations of the mind; such as inventions; literary and artistic works; designs; and symbols; names and images used in commerce.”¹

Electromagnetic devices have been around in the U.S. since the 1970’s play a large role in jeopardizing the protection of intellectual property and also human rights. The importance of protecting intellectual property rights and data embedded in ideas or creations of the mind are of the utmost importance for society to prosper in line with the utilitarian-pragmatic argument. It also has relevance in criminal and civil cases with regards to discovery or subpoenas. “The Geneva Declaration On The Future Of The World Intellectual Property Organization”² on several occasions mentions the need to keep up with the technological advances of the world in regards to intellectual property rights and also supports the call for a “Treaty on Access to Knowledge and Technology”³. Protecting intellectual property rights goes back to the “British Statute of Anne” (1710)⁴ and the “Statute of Monopolies” (1624)⁵ which are recognized as the earliest origins of the copyright and patent law.

In the U.S., protecting ideas has been relevant since the 1800’s or before as in 1855; U.S. Political Philosopher Lysander stated:

“That a man has a natural and absolute right—and if a natural and absolute,

¹ *What Is Intellectual Property?*, WORLD INTELL. PROP. ORG., <http://www.wipo.int/about-ip/en/>.

² GENEVA DECLARATION ON THE FUTURE OF THE WORLD INTELLECTUAL PROPERTY ORGANIZATION, <http://www.futureofwipo.org/futureofwipodeclaration.html>.

³ TREATY ON ACCESS TO KNOWLEDGE AND TECHNOLOGY, http://www.cptech.org/a2k/a2k_treaty_may9.pdf.

⁴ THE STATUTE OF ANNE; APRIL 10, 1710 The Avalon Project - Yale Univ., http://avalon.law.yale.edu/18th_century/anne_1710.asp

⁵ STATUTE OF MONOPOLIES 1623 U.K. Gov’t, <http://www.legislation.gov.uk/aep/Ja1/21/3/contents>.

then necessarily a perpetual, right—of property, in the ideas, of which he is the discoverer or creator; that his right of property, in ideas, is intrinsically the same as, and stands on identically the same grounds with, his right of property in material things; that no distinction, of principle, exists between the two cases.”⁶

Prior to the Leahy-Smith America Invents Act (AIA) of 2011⁷, the U.S. Court of Appeals for the Federal Appellate in the case of *Solvay S.A. v. Honeywell International (2014)*⁸ outlined the basic principle of protecting intellectual property; that the idea must first have “conception” before it being entitled to any protection from the courts⁹ codified in Pre AIA 35 U.S.C. 102(g)¹⁰ which follows customary international law. Otherwise, appropriation occurs. However, with the AIA in effect, the mentioned case has been overturned by statute and the AIA can perhaps be seen as the greatest deviation from universal protection of intellectual property since 1952. This is because what was known as the “poor man’s copyright”; where one could mail themselves the idea and be entitled to protection under U.S. copyright laws was abolished.

Proponents of the AIA argue that it has raised the standard of copyright material so that the owner must file for patents making the U.S. what is known as; “first to file” country. In the previous century, this may have been an acceptable practice requiring a poor man to follow certain procedure but in today’s world where technology is to the point where thoughts in the mind can be read

word for word¹¹ during recitation from brainwaves, it is necessary to protect the brainwave itself, not just the idea or “conception”. The AIA, which is the norm for protecting intellectual property could not be applied to protecting brainwaves as simply put; there are just too many which one would have to protect. Whether a “brainwave” is an “electronic communication” and data in the form of “signal intelligence” for all legal purpose when intended by consent or with judicial approval is debated. When there is no judicial sanction or consent to monitor an individual’s brainwaves containing data, they must remain private without the protection of intellectual property and any interception must be deemed illegal. This is in line with the “1986 U.S. Electronic Communications Privacy Act (ECPA)”¹².

There are arguments that brainwaves are more anatomical in nature rather than electronic and this is explained further in this essay. The harmful effects of electromagnetic devices are of relevance in considering human rights laws. As of today, there is no universally binding or federal legislature protecting us from these harmful devices. Protecting brainwaves by law would be the first step and advancement in protecting intellectual property rights as well since we are protecting the “creations of the mind” or biological data at its very inception; the data contained in the brainwave or thought which formulates the idea and creation of the mind. The “Copyright Clause” of the U.S. Constitution, more specifically Article 1,

⁶ LYSANDER SPOONER, THE LAW OF INTELLECTUAL PROPERTY- THE LAW OF NATURE Lysander Spooner ,

<http://lysanderspooner.org/intellect/ch1s7s8s9.html>.

⁷ 35 U.S.C. Stat. cmts. LEAHY–SMITH AMERICA INVENTS ACT - H.R. 1249 ().

⁸ *S.A. v. Honeywell Int’l (2014)*, .

⁹ LAWRENCE M. SUNG & JAMES H. WALLACE, JR., FEDERAL CIRCUIT PATENT BULLETIN: SOLVAY S.A., V. HONEYWELL INT’L INC. (Wiley Rein LLP 2014), <http://www.wileyrein.com/publications.cfm?sp=article&id=9432>.

¹⁰ *Id*, 102 Conditions for Patentability; Novelty and Loss of Right to Patent. , (102 (g)).

¹¹ Brian N. Pasley et al., *Reconstructing Speech from Human Auditory Cortex*, 2012 PLOS BIOLOGY, Jan. 31, 2012 at (2012), <http://www.plosbiology.org/article/info:doi/10.1371/journal.pbio.1001251> .

¹² 1986 U.S. Electronic Communications Privacy Act (ECPA) n.WIRE AND ELECTRONIC COMMUNICATIONS INTERCEPTION AND INTERCEPTION OF ORAL COMMUNICATIONS, 18 U.S.C. (Chapter 119).

Section 8, Clause 8¹³, which many writers rely on to automatically secure their is not applicable in this scenario as we are dealing with the conception of the idea in brainwaves, not finished work of an author.

Theoretically, ideas can never be destroyed or contained and the freedom of expression expressed in the 1st Amendment of the U.S. Constitution. As former Pakistani Prime Minister Benazir Bhutto stated:

“You can imprison a man but not an idea. You can exile a man, but not an idea. You can kill a man, but not an idea”.

However, first amendment rights must be weighed in with the rights to protect an idea and copyrights. An idea cannot be disclosed to a third party without the person sharing the idea so the 5th Amendment rights of self-incrimination are also relevant¹⁴. Every act which changed the world started off from an idea from its deepest conceptions in the human brain. There have been great advances in technology both in the medical and military fields to tap into our mind with possible malicious intent and this is why the protection of ideas are important now more than ever.

I. Technology and Brainwaves As Anatomy

Technological Advances In Signal Intelligence

James Boyle, a Scottish legal academic, in the book “Public Domain: Enclosing the Commons of the Mind” stated; “The history of patents includes a wealth of

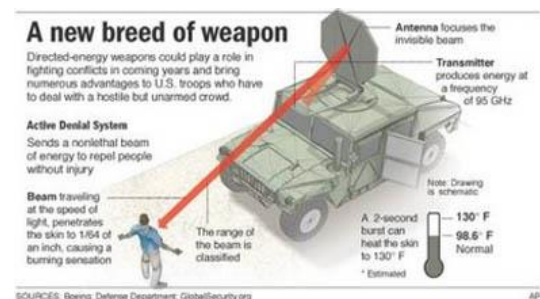
¹³ U.S. CONST. n. Article 1, Section 8, Clause 8.

¹⁴ *Id.*, n. 5th Amendment.

¹⁵ JAMES BOYLE, PUBLIC DOMAIN: ENCLOSING THE COMMONS OF THE MIND (Yale Univ. Press 2008)

¹⁶ BRAINWAVES TO BE USED AS IDENTIFICATION (The Daily Times - London 2005),
<http://www.rense.com/general69/ident.htm>.

attempts to reward friends of the government and restrict or control dangerous technologies.”¹⁵ This is very relevant to today’s world where potentially dangerous technology as shown has been researched upon to pick up words from brainwaves as demonstrated with the cited research from U.C. Berkeley. Electroencephalography (EEG) has long been used to pick up brainwaves and has been proposed by researchers as a potential “identification instrument”¹⁶. The issue of protecting



brainwaves is of utmost importance when it is determined that words can be reconstructed from it or has possibility to be used for ID’s to enter buildings, make payments, etc.

Electromagnetic devices and weapons have been around since the 1970’s and are nothing new referencing the “Electromagnetic or Other Direct Energy Weapon Launcher” patented in the U.S. for defense research purposes¹⁷. Even an “Apparatus and Method for Remotely Monitoring and Altering Brainwaves” was patented in the U.S. in in 1974¹⁸ similar to the “Method and System for Altering Consciousness” patented here in the U.S. in 1991¹⁹. These electromagnetic devices have great use for harm. The most relevant device patented in the U.S. in relation to brainwaves

¹⁷ ELECTROMAGNETIC OR OTHER DIRECTED ENERGY PULSE LAUNCHER [hereinafter US4959559 A], <http://www.google.com/patents/US4959559>.

¹⁸ APPARATUS AND METHOD FOR REMOTELY MONITORING AND ALTERING BRAIN WAVES [hereinafter US4959559 A], <http://www.google.com/patents/US3951134>.

¹⁹ METHOD AND SYSTEM FOR ALTERING CONSCIOUSNESS [hereinafter US 5123899 A], <http://www.google.com/patents/US5123899>.

and electronic communications may be the “Communication System and the Method Including Brainwave Analysis And/or Use Of Brain Activity”²⁰ as it is capable of picking up brainwaves to determine the communication capable of using satellites to pick up brain signals as stated on the patent description.

Other devices such as the “iBrain”²¹ allows communication while merely thinking while other devices allow the user to accept or reject a call simply by thinking about it, designing 3D models with just thought, enter passwords, or even moving your wheelchair with thoughts^{22,23}. There are also the Radio Frequency Identification Device (RFID)²⁴ chips which are openly sold in the medical market and inserted into people so they can be tracked. According to the Massachusetts Institute of Technology²⁵, a similar use for RFID’s has been found to alter one’s body internally by tampering with certain chemical and hormone levels to prevent births, a possible form of contraception. However, misuse in large populations can also be an act of genocide under Article 2 (d) of the “1948 Geneva Convention on the Prevention and Punishment on the Crime of Genocide”²⁶. Laser technologies projecting holograms have also been used in combination with electromagnetic weapons in torture cases to

create a "3D" effect but there is no evidence that these weapons can wirelessly create solid items. Via these weapons, there is also the use of microwave technologies to induce auditory effects directly into your brain, otherwise known as Skull-To-Voice (S2K) technology.

Dr. Igor Smirnov, the founder of the Psychotechnology Institute of Moscow wrote several books on psychotronic weapons being used to alter thoughts and behavior when the USSR was fighting in Afghanistan during the 1980’s. In 1998, U.S. Army Lt. Col. Timothy L. Thomas wrote about the medical basis for usage of what he termed “PSYOP” weapons published in the Strategic Studies Institute of the U.S. Military²⁷. He also mentioned that the technology to read and alter mind-states in the PSYOP was being developed all around the world including in Russia as Russian Army Major General I. Chernishev wrote in the magazine *Orienteer* in February of 1997 the same. Exact wave length frequencies for these weapons to be used, destabilizing one’s mind using these weapons, and effects on the data processing centers of the mind were all documented by Lt. Col. Thomas in the U.S. Military publication.

²⁰ COMMUNICATION SYSTEM AND METHOD INCLUDING BRAIN WAVE ANALYSIS AND/OR USE OF BRAIN ACTIVITY [hereinafter US6011991 A], <http://www.google.com/patents/US6011991>.

²¹ DAVID EWING DUNCAN, *A Little Device That’s Trying to Read Your Thoughts*, 2012 THE NEW YORK TIMES (2012), <http://www.nytimes.com/2012/04/03/science/ibrain-a-device-that-can-read-thoughts.html>.

²² Brian Handwerk, *Five Incredible—and Real—Mind-Control Applications*, 2013 NAT’L GEOGRAPHIC, Aug. 29, 2013 at (2013), <http://news.nationalgeographic.com/news/2013/08/130829-mind-brain-control-robot-brainwave-eeg-3d-printing-music/>.

²³ Brian Handwerk, *NEW RESEARCH: COMPUTERS that CAN IDENTIFY YOU BY YOUR THOUGHTS*, 2013 U.C. BERKELEY SCH. OF INFO., Apr. 3, 2013 at (2013), <http://www.ischool.berkeley.edu/newsandevents/news/20130403brainwaveauthentication>.

²⁴ Suzanne LeBoeuf, *Brainwaves Effected By Remote Computers: Humanity Suffers*, 2011 EXAMINER, Sept. 26, 2011 at (2011), <http://www.examiner.com/article/brainwaves-effected-by-remote-computers-humanity-suffers>.

²⁵ SARAH GRAY, *Birth Control of the Future Could Be Activated with a Wireless Remote*, 2014 MASS. INST. OF TECH., July 7, 2014 at (2014),

http://www.salon.com/2014/07/07/birth_control_of_the_future_could_be_activated_with_a_wireless_remote/.

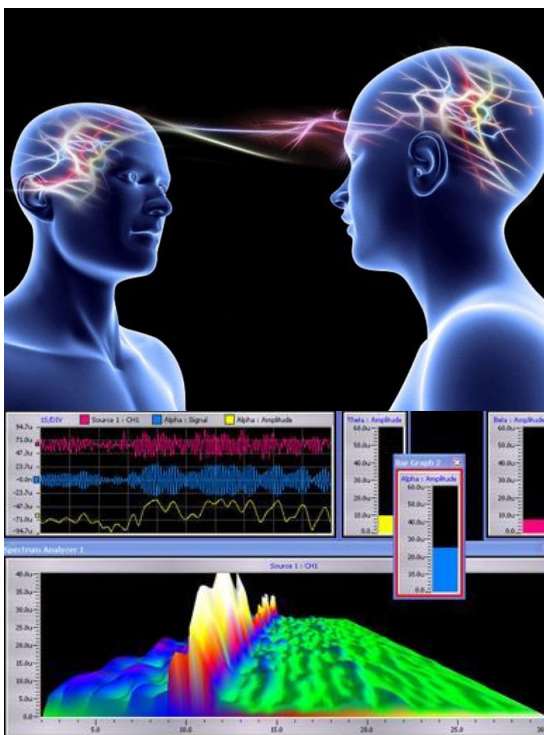
²⁶ 1948 CONVENTION ON THE PREVENTION AND PUNISHMENT OF GENOCIDE (United Nations 1948), <https://treaties.un.org/doc/Publication/UNTS/Volume%2078/volume-78-I-1021-English.pdf>.

²⁷ TIMOTHY L. THOMAS, *The Mind Has No Firewall*, 2014 U.S. MILITARY STRATEGIC STUD. INST. PARAMETERS, July 7, 2014 at (2014), <http://strategicstudiesinstitute.army.mil/pubs/parameters/Articles/98spring/thomas.htm>.

More recently in 2014, National Security Agency (NSA) defaulter Snowden revealed that the FBI and NSA can watch your thoughts form as you type and the famous social networking website Facebook was engaging in “Mind Control Experiments” funded by the U.S. Department of Defense and the Pentagon^{28,29}. The team that conducted these experiments stated that “emotions spread via contagion through a network”. This is very closely linked with how emotions can be read and intercepted through the network of the electromagnetic spectrum with an electromagnetic spectrometer falling under the category of “signal intelligence”. In addition, the U.S. Department of Army responded to a Freedom of Information Access (FOIA) request by Mr. Donald Friedman detailing the technical

specifics of psychotronic weapons, microwave weapons, and picking up electromagnetic signals to “read the mind”³⁰.

With the facts on hand from government sources that this technology exists, there is great potential for misuse as someone may use your data embedded in your brainwaves or biometric and genetic data to forge applications, enter buildings, steal your ideas, or even repeat your thoughts back to you as a form of torture. Therefore, there can be no doubt that these weapons exist so we must move on to the question of how to protect or “patent” every brainwave of every person as each is unique which is not possible which is why we need legislation which can invoke universal jurisdiction and is universal in nature in protecting brainwaves.



Brainwaves As Anatomy

There is also the possibility that brainwaves may not be considered “electronic communication” under “signal intelligence” since the brainwaves are not “electronic communication” in itself as in case of a manmade communication product such as a cell phone or computer but is part of one’s body. From this perspective, we view brainwaves anatomically such as a part of the body such as an arm or a leg. Dr. Victor Solntsev of the Baumaan Techology Institute in Moscow was a proponent of this view as he stated the human body must be viewed as an “open system the human body communicates with its environment through electromagnetic, gravitational, acoustic, or other effects. A change in these effects can change the “psycho-physiological equilibrium”. Penetrating your body with an

²⁸ Joe Wolverton, II, *Did Pentagon Help Fund Facebook's Mood Manipulating Experiment?*, 2014 THE NEW AM., July 2, 2014 at (2014),

<http://www.thenewamerican.com/tech/computers/item/18613-did-pentagon-help-fund-facebook-s-mood-manipulating-experiment>.

²⁹ *Facebook Mind Control Experiments Linked to DoD Research on Civil Unrest*, 2014 RT, July 3,

2014 at (2014), <http://rt.com/usa/169848-pentagon-facebook-study-minerva/>.

³⁰ BIOEFFECTS OF SELECTED NONLETHAL WEAPON (U.S. Dep’t of Army 2006), http://www.stayonthetruth.com/resources/Bioeffects_Selected_Non-Lethal_Weapons/Bioeffects_of_Selected_Non-Lethal_Weapons.pdf.

electromagnetic device to pick up waves or with Direct Energy Weapons (DEW)³¹ may amount to anywhere between simple assaults to attempted murder or torture depending on the strength used as these weapons have lethal effects. It would not be viewed as rape since the laws are very specific in relation to penetration with a solid object for sexual assault and body parts for rape. Nevertheless, the mind altering weapons certainly have the ability to change your physiological state through usage of psychotronic weapon affecting your subconscious, conscious, and superconscious states of mind according to Dr. Solntsev.

While any harm from the illegal surveillance of brainwaves or arousing brainwaves with attacks using DEW's are legally protected in court given the source of the perpetrator with standard torture laws, viewing brainwaves as an anatomical body part leaves us with no way of protecting the data and intellectual property as of today. If "H.R. 2977 Space Preservation Act of 2001"³² had passed in U.S. Congress, there would be much more scope of protecting the intellectual property of brainwaves in the U.S. since a bill to that effect would be building on an earlier bill recognizing the harmfulness of DEW including reading and controlling the mind. A similar proposal was given to the European Union (E.U.), Petition 1168/2003³³ banning all "psycho-technologies" which includes DEW and technology which might detect and alter your brainwaves. Access to technology to

intercept and change brainwaves must have requirements for licensing and users should be required to go thru a thorough background check just as with the sale of firearms if it is ever permitted to civilians.

However, this technology should be limited to military use as it is as of today since if it is given to law enforcement, there is great potential for misuse. Organizations such as California Police Brutality Lawyers show us that there have been minimum 300 deaths from police misusing tasers up to 2008³⁴ and with current U.S. National Security Administration (NSA) spying allegations, it would not be surprising if the federal agencies were using this on civilians without legal sanction. Appropriation by failure to protect the intellectual property of ideas contained in brainwaves may also be designated into the normal structure of "substantial similarity". Non-literal appropriation, that is not copying the exact "idea" or words may occur as J. Thomas McCarthy's "McCarthy's Desk Encyclopedia of Intellectual Property"³⁵ states that one work appropriates "the fundamental structure or pattern" of another. This is very relevant to how the brainwaves can be protected. By genetic makeup, we are linked with one another. This also extends to brainwaves according to the U.S. National Institute of Health³⁶.

³¹ *SOVIET DIRECTED ENERGY WEAPONS -- Perspectives on Strategic Defense*, 1985 U.S. CENT. INTELLIGENCE AGENCY (CIA) 31 (1985), http://www.foia.cia.gov/sites/default/files/document_conversions/17/19850305.pdf.

³² H.R. 2977, H.R. Res., Cong. n.Space Preservation Act (2001).

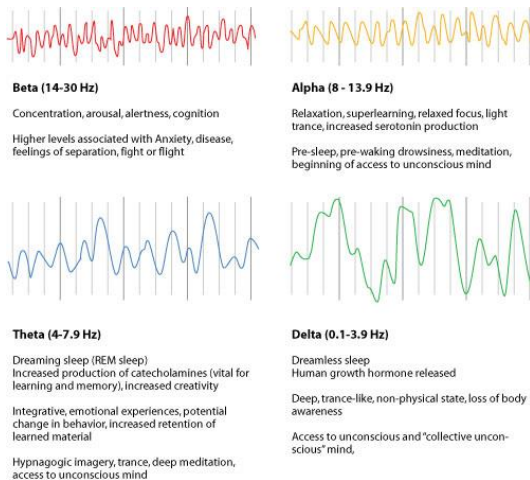
³³ *Petition 1168/2003 By Nathalie Luthold (French), on Behalf of the Association Opposing Abuse of Psycho-technologies, Bearing 115 Signatures Opposing the Abuse of Directed Energy Weapons*, 2004 EUR. PARLIAMENT, Oct. 21, 2004 at 31 (2004), http://www.europarl.europa.eu/meetdocs/2004_2009/documents/cm/544/544077/544077en.pdf.

³⁴ *TASER POLICE BRUTALITY IN CALIFORNIA* Cal. Police Brutality Lawyers, <http://californiapolicebrutalitylawyers.com/tasers.html>.

³⁵ J. THOMAS MCCARTHY, *MCCARTHY'S DESK ENCYCLOPEDIA OF INTELLECTUAL* (Bureau Of Nat'l Affair 1995).

³⁶ *Scientists Find Genes that Influence Brain Wave Patterns*, U.S. NAT'L INST. OF HEALTH, Apr. 26, 2010 at <http://www.nih.gov/news/health/apr2010/niaaa-26.htm>.

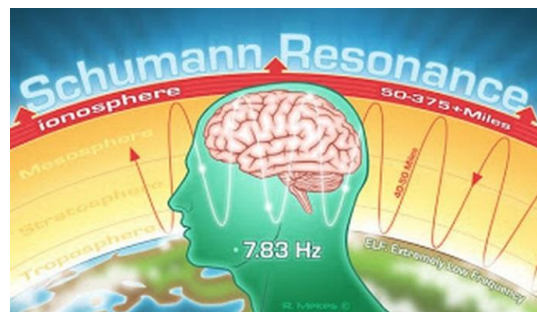
It is a well known in medicine that brainwaves are of different frequencies and EEG can pick up those frequencies. During deep sleep, brainwave frequencies are known to be at 4 Hz - 0.5 Hz. When brainwave frequencies are recorded up to 8 Hz, the subject will still be asleep. It is interesting to point out at exactly 7.83 Hz, the human brain aligns with the earth in a phenomenon known as the Schumann Resonance³⁷ as the brain uses this frequency to tell the difference between day and night. When we reach the Schumann Resonance, alpha brain waves resonate throughout our body to either wake a person up or put them to sleep and can be considered more as the “equilibrium” of our brainwave frequency pattern. Beyond 22 Hz can be dangerous for a person as it can induce panic attacks but when you reach beyond 100



Hz, there are mass feelings of ecstasy. The feelings we have relative to brain frequencies are nothing more than a product of our environment combined with chemical balances in the brain. For example, at 4 Hz or 8 Hz, Gamma-Aminobutyric Acid (GABA) is emitted for sleeping purposes and as we reach alpha waves of around 20 Hz, serotonin which is the chemical responsible for anti-depression is emitted keeping one awake, conscious, and happy. H.H. Dalai Lama is correct when he explains through his quotes that happiness is a choice as serotonin is

automatically emitted when awake at 20 Hz and it is up to us to make use of the serotonin, endorphins, or dopamine at alpha wave levels combining to our perception and IQ (Intelligence Quotient) as well as our EQ (Emotion Quotient).

The right to life is guaranteed via various international human rights legislature which is later explained in this article but if we are to view brainwaves anatomically, there is much more scope for protecting them as judicial officers and the lawmakers would be more focused on protecting the human body in relation to electromagnetic weapons. This is opposed to protecting brainwaves as communications or data which would require much more work both by the law enforcement agency who is trying to tap into the brainwaves and also by the defendant who must seek protection from surveillance related law which is explained.



II. Protection Of Brainwaves In The U.S.

Viewing Brainwaves As “Electronic Communications” And “Data”

With the above mentioned, it must be emphasized that intellectual property must be protected now more than ever, down to the brainwave which formulates a creative idea. It is not to say that the owners and sellers of the technology stated above would engage in

³⁷ EARTHING SHEETS CONNECT US TO THE SCHUMANN RESONANCE OF THE EARTH (Earthrunners 2013), <http://www.earthrunners.com/earthing-sheet>.

such practices but we must realize the consequences of what would happen if such technology fell in the wrong hands (criminals, terrorists, etc) or if law enforcement were to use it on innocent persons. It is debatable if law enforcement or military overseeing prisoner's of war in cases such as Guantanamo Bay should ever have legal sanction to use such devices as they may amount to cruel and unusual punishment. As brainwaves contain data, electronic data protection acts such as the "1986 Electronics Communication Privacy Act (ECPA)" is relevant. The several case law definitions of requirements for a patent in the U.S and under international law may be revisited for new legal opinion with regards to brainwaves and under the "Geneva Declaration On The Future Of WIPO" Convention; a new "Treaty on Access to Knowledge and Technology" should also be introduced to promote information on new technology.

The WIPO Conventions are domestically incorporated by the "1998 Digital Millennium Copyright Act"³⁸ in the U.S. Section 512 (a)³⁹ as it limits a third party such as a service provider to transmit data unless the data transmission is initiated by the person itself. In this way, the transmission of data to third party service providers are protected as you must obtain consent. However, the need for additional protection of brainwaves to be expressly codified and placed under statute still exists as since it is realized that brainwaves may be read. The requirement for protection is required both in criminal and civil cases related to discovery and subpoenas. With regards to discovery, one does not know what one cannot prove.

To think of a world where our thoughts are being categorized as "electronic communications" or "data" and warrants are

obtained to tap into one's mind to criminalize thought is barbaric in nature as it infringes upon the very basic human rights of mankind; to think, to express, to create, etc. In addition, if one has a knowledge of a crime and does not want to disclose this, once again with a warrant to tap your thoughts to prove a crime would be a witch-hunt with no defense as a normal citizen would not be able to counter such an allegation in this period of time. Obviously, legal protection against tapping into thoughts are needed. To do this, there is no doubt that new international legal avenues must be formed and domestic incorporation for the same. In addition, government surveillance of "electronic communications" and data in relation to brainwaves is described below; adding to the need for protection. However, there are practical laws in place today in the U.S. and other nations in Europe which prevent illegal surveillance and protect the intellectual property of brainwaves to some extent.

The ECPA provides that a person may not "*intentionally intercept, endeavor to intercept or procure any other person to intercept or endeavor to intercept, any wire, oral or electronic communication.*" The ECPA combines the previous U.S. "Wiretap Act", "Stored Communications Act", and the "Pen-Register Act". In the U.S., it has been used to electronic communications between parties but it is agreed widely by U.S. Congress, legal scholars, and civil society organizations such as the American Civil Liberties Union (ACLU) that the act requires reform as it was drafted in 1986, long before many of the advanced technology we use today such as email. However, there have been cases after the enactment of the act such as *Michael A. Smyth v. The Pillsbury Company (1996)*⁴⁰ or *Bourke v. Nissan Company (1993)*⁴¹ that have considered the usage of

³⁸ 17, U.S.C. n. Digital Millennium Copyright Act (DCMA) (1998).

³⁹ *Id.*, 512 U.S.C. n. Limitations on liability relating to material online ().

⁴⁰ *Michael A. Smyth v. The Pillsbury Company (1996)*, ,

http://www.loundy.com/CASES/Smyth_v_Pillsbury.html.

⁴¹ *Bourke v. Nissan (1993)*, ,
http://www.loundy.com/CASES/Bourke_v_Nissan.html.

email in employment related cases which did not protect the privacy of the individuals.

Once again, this is extremely important in relation to discovery or subpoenas in both criminal and civil cases as one cannot prove what one does not know and when our electronic communications are being tapped, especially with regards to viewing brainwaves as such; we are at risk for a police state society. The ECPA falls short in many areas of protecting data via electronic communications. If we are to consider the eminence of brainwaves as “electronic communication” containing data, the ECPA would not be able to protect an individual as of today. Recognizing this fact, the ACLU has proposed a draft amendment to the ECPA which includes that electromagnetic devices cannot be used against an individual to intercept data and communications⁴². If such an amendment is made to the ECPA, it would essentially ban all the technological devices stated above in relation to collecting information from brainwaves of an individual.

Electromagnetic Devices And Signal Intelligence

With relation the U.S. case law of intellectual property; the case of *Solvay S.A. v. Honeywell International (2014)* where the basic concept of “conception” or the birth of an idea is a requirement for patent which set the precedent, a similar precedent must be set to protect brainwaves through challenging the cited usage of electromagnetic weapons or through legislature in the U.S. Generally, conception is defined as the “*formation in the mind of the inventor, of a definite and permanent idea of the complete and operative invention, as it is thereafter to be*

applied to practice.” To protect “conception”, the Public Act 256 of 2003⁴³ in Michigan is a model for the rest of the nation and was for the rest of the world to follow as it is the first piece of legislation to effectively ban “harmful electromagnetic devices”, “harmful biological devices”, etc. This is the only piece of legislature in the world which expressly bans electromagnetic weapons and can be utilized practically in the state of Michigan in criminal and civil cases. The European Union has come close to this but has not expressly banned these devices which is explained further in this article. Case law under this act has turned up virtually no information, at least that which can be released to the public. Federally, a bill was introduced in U.S. Congress in 2001-2002 titled H.R. 2977 Space Preservation Act of 2001. Although it was not passed in the House of Representatives, Sec. 7 (2)(ii)(II)⁴⁴ of this act expressly prohibited any weapon or weapon system which could be used for mind control of a person similar to the proposed amendments to the ECPA but much more focused on electromagnetic weapons and DEW.

Furthermore, following case law in the U.S. and the founding documents of the nation, protection against illegal surveillance is provided by the 4th amendment⁴⁵ of the U.S. Constitution. Although the dicta is limited to solid belongings and does not extend to “electronic communications”, in early as 1928, there was case law in the U.S. for protection in the famous case of *Olmstead v. United States (1928)*⁴⁶. Additionally, the idea of protecting “electronic communications” was discussed as early as 1935 in case of *Katz v. United States (1935)*⁴⁷ where Justice Stewart observed that there could be no exception to the rule that electronic surveillance could be committed

⁴² *Legislative Briefing Kit: Electronic Monitoring*, 1998 AM. CIV. LIBERTIES UNION, Dec. 31, 1998 at (1998), https://www.aclu.org/racial-justice_womens-rights/legislative-briefing-kit-electronic-monitoring#model.

⁴³ 256 Mich. Reg. n.Public Act No. 256 (Enrolled House Bill No. 4513) (Jan. 1, 2004).

⁴⁴ *Supra.*, Sec. 7, (2)(ii)(II)

⁴⁵ *SUPRA.*, n.4th Amendment.

⁴⁶ *Olmstead v. United States (1928)*, .

⁴⁷ *Katz v. United States (1935)*,

without judicial approval although notice is not required.

From then till after the passage of the ECPA, there have been many protocol requirements to engage in the espionage of electronic communications First we may look at “Title 18, United States Code, Section 2518(8)(d)⁴⁸” which states an authority:



“requires an inventory notice to be served on persons named in the order, and ” .. . other such parties to intercepted communications as the judge may determine ... is in the interest of justice ... ”

This must be done within a reasonable time, but not later than 90 days after the end of the last extension order. The government has an obligation to categorize those persons whose communications were intercepted so that the judge may make a reasoned determination about whether they will receive inventory notice. Case law on this matter is *United States v. Donovan (1977)*⁴⁹; *United States v. Alfonso (1977)*⁵⁰, and *United States v. Chun (1974)*⁵¹ according to the U.S. Department of Justice⁵².

Therefore, the use of technology tapping into brainwaves translating into

words or speech which may be labeled as “signals intelligence” under the larger scope of “electronic communications” and “data” without consent or judicial order consent past 90 days would be illegal. The renewal of a warrant for the same can only be sustained if there is reasonable cause for the law enforcement agencies and this must be weighed with the harm it is doing as well or otherwise, the warrant to monitor must be cancelled or at the least; notice must be served to the defendant. This particularly applies to military, intelligence, or defense situations as “Section 11.2.2. Air Force Policy Directive”⁵³. In “C5.2.3.6 of the Procedure governing Department of Defense Intelligence Components that affect United States Persons” which also governs “Signal Intelligence Gathering” states that the intelligence gathering may not extend 90 days without consent or notice⁵⁴. In relation to the U.S. Department of Justice’s statute on Electronic Surveillance, “Section 9-7.302 (Consensual Monitoring—Procedures for Lawful, Warrantless Monitoring of Verbal Communications)” will likely not be applicable as collecting words from brainwaves does not fit the definition of “verbal communication” provided although this act also limits warrantless surveillance to 90 days and 180 days if evidence requiring it is there.

Even Section 207 of the “Patriot Act”⁵⁵ states that surveillance cannot exceed a year and this is only for agents of a foreign power in accordance with Section 105 (e)(1) of the “Foreign Intelligence Surveillance

⁴⁸ Supra.,Section 2518 (8) (d),

⁴⁹ *United States v. Donovan (1977)*,

⁵⁰ *United States v. Alfonso (1977)*,

⁵¹ *United States v. Chun (1974)*,

⁵² *ELECTRONIC SURVEILLANCE MANUAL PROCEDURES and CASE LAW FORMS*, U.S. DEPARTMENT OF JUST., June 25, 2005 at 31, <http://www.justice.gov/criminal/foia/docs/elec-sur-manual.pdf>.

⁵³ General Norton A. Schwartz, *AIR FORCE POLICY DIRECTIVE 1*, U.S. AIR FORCE, Aug. 7, 2012 at 31, <http://www.fas.org/irp/doddir/usaf/afpd1.pdf>.

⁵⁴ Under Secretary Of Defense For

Policy, *Procedures Governing the Activities of DOD Intelligence Components that Affect United States Persons*,1982 U.S. DEPARTMENT OF DEF. 31 (1982),

http://www.fas.org/irp/doddir/dod/d5240_1_r.pdf.

⁵⁵ UNITING AND STRENGTHENING AMERICA BY PROVIDING APPROPRIATE TOOLS REQUIRED TO INTERCEPT AND OBSTRUCT TERRORISM (USA PATRIOT ACT) ACT OF 2001, Pub. L. No. 107-56, , Stat. (2001).

Act”⁵⁶. Therefore, the threshold for sustaining surveillance against the brainwaves emitted and subsequently picked up by signal intelligence machines is very high in the U.S. and in line with the protection of intellectual property of an idea expressed in any other form. While it is argued that the existing U.S. statutes and case law protects appropriation of ideas contained in brainwaves if it is considered “electronic communication” with consent or judicial order, this is far from the truth as brainwaves have not been considered in any case and we do not know if these acts have protected anyone. It is required for U.S. Congress to enact legislation for the same or for a tort to be brought up before the U.S. Courts when it is clear that illegal surveillance of brainwaves is occurring.

Relative Human Rights In The U.S.

The majority of human rights laws in the U.S. relative to this issue are domestic incorporations or implementations of customary international law and U.N. Conventions as the United States has many reservations on international law which is why it did not sign the Rome Statute⁵⁷ of the International Criminal Court (ICC). There is no doubt that these electromagnetic devices can cause serious physical or mental injury and even death which is why it was banned in Michigan through Public Act 256 (2003) which has dual usage as a human rights law and preventing unlawful surveillance or experimentation. However, for the rest of the U.S., only domestically incorporated legislature of international law is applicable.

The topic of medical experimentation of persons without their

consent dates back to Nazi Germany and was found as a crime against humanity in the Nuremberg Trials but latest judgments in the U.S. does not follow this. Controversially, in the case of *Greenberg v. Miami Children's Hospital Research Institute (2003)*⁵⁸, judges in the District Courts of Florida passed a dicta that there are no rights for one to keep his claim over his body parts during medical experimental research. This brings up the topic of unlawful experimentation as in some cases, it may amount to torture via medical experimentation and electromagnetic devices. In the U.S., torture via such devices could theoretically be addressed through the “Torture Victim Protection Act” (TVPA)⁵⁹ which domestically incorporates the “1984 United Nations Convention on Torture (CAT)”⁶⁰ if the existence of such devices for such purposes can be proven beyond a reasonable doubt. Most member-States of the U.N. have signed and ratified the CAT. Torture is defined under Section 3 (b) which expressly states in Section 3(b) 2(b) that torture extends to;

“Procedures calculated to disrupt profoundly the senses or the personality;”

The use of Direct Energy Weapons and psychotronic weapons have been proven to cause harmful effects to the human body so a person may be charged under this act for torturing another with this technology. The U.S. is also signatory to international legislation which provides for protection against electromagnetic technology. One unique feature of the International Covenant on Civil and Political Rights (ICCPR)⁶¹ is that it is legally binding upon states by respecting human rights but expands on it in Article 19 (2) stating:

⁵⁶ 50 n. Foreign Intelligence Surveillance Act, U.S.C. (1978).

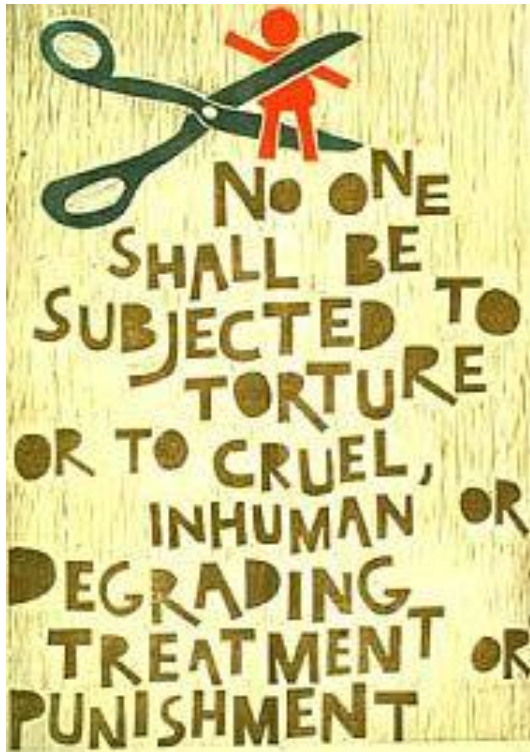
⁵⁷ THE ROME STATUTE (International Criminal Court 2002),

⁵⁸ *Greenberg v. Miami Children's Hospital Research Institute (2003)*,

⁵⁹ Torture Victim Protection Act, Pub. L. No. 102-256, Stat. (1992).

⁶⁰ UNITED NATIONS CONVENTION AGAINST TORTURE AND OTHER CRUEL, INHUMAN OR DEGRADING TREATMENT OR PUNISHMENT (1985), <http://www.hrweb.org/legal/cat.html>.

⁶¹ INTERNATIONAL COVENANT ON CIVIL AND POLITICAL RIGHTS (Office Of The High Comm'r On Human Rights 1966), <http://www.ohchr.org/en/professionalinterest/pages/ccpr.aspx>.



2. *“Everyone shall have the right to freedom of expression; this right shall include freedom to seek, receive and impart information and ideas of all kinds, regardless of frontiers, either orally, in writing or in print, in the form of art, or through any other media of his choice.”*

It is important to note the key words “regardless of frontiers” and “through any other media of his choice” in relation to freedom of expression. This necessary means that one cannot be arrested for expressing his thoughts but can one be arrested for just thought alone? Perhaps not but lets consider a situation where a third-party has tapped into one’s thoughts which may be offensive at the time and is airing it out on radio for others to listen. Beyond being a simple tort of nuisance, can a plaintiff file charges for being exposed to hateful rhetoric that he or she considers offensive just because a third-party

is putting one’s offensive thoughts on a loudspeaker? With the combination of the freedom of expression guaranteed in the ICCPR and the 1st Amendment of the U.S. Constitution⁶², for as long as the person did not voluntarily choose to make public his hateful thoughts, it would seem he would not could be held liable as he is a victim to the effects of electromagnetic weapons such as torture and illegal surveillance or experimentation. More so, it would be the person who is responsible illegal tapping of the brainwaves who would be held responsible for invasion of privacy at the least and considering the circumstances, charges could be extended to attempted murder.

While not legally binding, the Universal Declaration of Human Rights (UDHR)⁶³ which the U.S. is also signatory to guarantees essential basic human rights of a person. Article 18 and 19 state:

18. Everyone has the right to freedom of thought, conscience and religion; this right includes freedom to change his religion or belief, and freedom, either alone or in community with others and in public or private, to manifest his religion or belief in teaching, practice, worship and observance.

19. Everyone has the right to freedom of opinion and expression; this right includes freedom to hold opinions without interference and to seek, receive and impart information and ideas through any media and regardless of frontiers.

While Article 19 of the UDHR is very similar to the question and answer posed above, Article 18 of the UDHR is very important as it expressly states that each person is free to think whatever they would like without penalty. However, it is that very article which is being intruded upon by electromagnetic devices. Freedom of thought no longer exists in the manner it did when the UDHR was written as now it is possible to

⁶² SUPRA., n.1st Amendment.

⁶³ THE UNIVERSAL DECLARATION ON HUMAN RIGHTS(United Nations 1948), <http://www.un.org/en/documents/udhr/>.

change ones thought through electromagnetic weapons and therefore he or she is not free to think. The combination of a state Party to the UDHR and ICCPR is known as the “International Bill of Human Rights” as postulated in U.N. General Assembly Resolution 217 A (III)⁶⁴. It is also important to point out that the International Bill of Human Rights is customary international law meaning that a nation does not need to be signatory to the UDHR, ICCPR, or CAT to uphold these principles and the same would apply to the U.S. which is signatory to all of the above.

The civil case of *James Walbert v. Jerimiah Redford* (2008) is a good example of this and was historical as for the first time, the U.S. courts in recognized that Mr. Walbert had been attacked, tortured, and harassed by “electronic means”⁶⁵ and mind changing electromagnetic radiation weapons. However, this took some political will as the government is hesitant to recognize such technologies even with such compelling evidence which is why no criminal cases have yet been brought up with the existing legislation. U.S. Congressmen Jim Guest representing the 4th District of Missouri had to intervene in this case by attesting to the fact that Mr. Walbert had been implanted with an RFID chip which caused damage via electronic means. The plaintiff used Department of Defense (DoD) documents previously mentioned to substantiate his claim upon which the defendant did not show up so redress was given. This serves as the first precedent where electronic weapons have been used in the U.S. but this was a civil lawsuit, not criminal as prosecutor’s have not yet responded to this grave threat which many have claimed is occurring to them

⁶⁴ INTERNATIONAL BILL ON HUMAN RIGHTS (United Nations 1948), <http://daccess-dds-ny.un.org/doc/RESOLUTION/GEN/NR0/043/88/IMG/NR004388.pdf?OpenElement>.

⁶⁵ DAVID HAMLING, COURT TO DEFENDANT: STOP BLASTING THAT MAN’S MIND! (Wired 2009), <http://www.wired.com/2009/07/court-to-defendant-stop-blasting-that-mans-mind/>.

which is why it is necessary to open a legitimate discussion on it in legal forums.

Director of the Security and Defense Initiative at Arizona State University, Werner Dahm, who is the former U.S. Air Force Chief Scientist is doing exactly that⁶⁶. He has opened discussion through this initiative on the harmful effects of electromagnetic weapons via lasers with details into them such as describing the effects of using 15 kilo-watt lasers on naval ships. He has also provided victims of such weapons described in the article to come and share their pain of such Active Denial Systems (ADS) by the U.S. Army which is very similar to Direct Energy Weapons (DEW) as both rely on the electromagnetic spectrum which is the basis for the devices sought to be banned by the ACLU in their recommendations for revisions of the ECPA. ADS have the capability of targeting any muscle or body part in combination with electromagnetic waves. Opening forums of discussion such as this by credible panel hosts can be a step in the right direction to open the eyes of the legal community to the scientific existence and threats of such devices. Limiting our discussion to Congress or local assemblies would not adequately address the needs of our citizens in our democracy. Civil rights and human rights organizations have been hesitant to discuss this as well due to lack of political interest and there is no doubt these organizations are needed to lobby lawmakers into passing legislation in the interests of the citizens protecting human rights in relation to electromagnetic weapons as we are far from this requirement.

The need for improving human rights in the U.S. is embedded in the founding documents in the nation as 9th⁶⁷ and 14th

⁶⁶ Torie Bosch, *Are Lasers the Future of War? a Future Tense Event Recap.*, 2013 SLATE, Jan. 16, 2013 at (2013), http://www.slate.com/blogs/future_tense/2013/01/16/werner_dahm_spencer_ackerman_discuss_directed_energy_weapons.html.

⁶⁷ SUPRA., n.9th Amendment.

amendment⁶⁸ of the Constitution recognized that not all rights were guaranteed in the original Constitution.

III. Protecting Brainwaves Under Transnational And International Law

To protect brainwaves without patenting each one which would be nearly impossible, there must be a common convention or international legislature which automatically protects one's brainwaves and data considering "substantial similarity" just as the "Berne Convention"⁶⁹ automatically protects an author's work without any additional filing. While this may be in conflict the current AIA in the U.S., this would be the only logical method of protecting the intellectual property of the actual brainwave and the idea contained in the brainwave. A United Nations (U.N.) Convention based on existing transnational law detailing the harmful effects of these weapons and to ban them for use against civilians including protecting brainwaves may be drafted. This will serve the dual purpose of protecting thoughts for intellectual property scenarios and primarily as a human rights document so basic rights such as freedom of expression or freedom of thought are not infringed upon.

European Union Law

The European Union (E.U.) also maintains an act similar to the ECPA of the U.S. titled the "Convention for the Protection of Individuals with regard to the Automatic Processing of Personal Data"⁷⁰ but this is also

outdated as it was enacted in 1981. However, the "Draft General Data Protection Regulation" adopted by the E.U. in March of 2014⁷¹ building on E.U. Directive 95/46/EU expressly states that processing of "genetic data" is protected in Article 9 (1) and "biometric data" is subject to assessment as per Article 33 (2) (d) as both are treated a "personal data". Brainwaves would fall under the category of "biometric data" and "genetic data" as genes are expressed in the brain through a biological process. This regulation still falls short of mentioning the regulation or banning of electromagnetic devices and procedure for the collection of biometric or genetic data outside of use for processing for items such as passports, etc. More so, the regulation does not expressly ban electromagnetic devices for harmful purposes so the victim is still left with the burden of proving the existence of such devices. If the law stated and banned these devices, there would be more scope for victims to approach law enforcement agencies or private security firms to seek assistance to end their use from harmful weapons.

In *Harman & Hewitt vs U.K* (1992), the European Court of Human Rights (ECtHR) ruled in 1992 that the 'lack of a statutory basis could be fatal to claims' of an intelligence agency to justify that its actions 'were in accordance with the law.' As such, codifying the procedure of usage of electromagnetic devices to record brainwaves would be in the interests of proponents of strengthening the intelligence systems such as law enforcement officials as well. This would give law enforcement authorities and intelligence agencies clear cut rules to go by to make their claims as without

⁶⁸ SUPRA., n.14th Amendment.

⁶⁹ BERNE CONVENTION FOR THE PROTECTION OF LITERARY AND ARTISTIC WORKS (PARIS TEXT 1971) Cornell Univ. Law School , <http://www.law.cornell.edu/treaties/berne/overview.html>.

⁷⁰ CONVENTION FOR THE PROTECTION OF INDIVIDUALS WITH REGARD TO AUTOMATIC PROCESSING OF PERSONAL DATA (Council of Eur. 1981),

<http://conventions.coe.int/Treaty/en/Treaties/Html/108.htm> .

⁷¹ EUROPEAN PARLIAMENT ADOPTS DRAFT GENERAL DATA PROTECTION REGULATION; CALLS FOR SUSPENSION OF SAFE HARBOR (Hunton & Willams LLP 2014), <https://www.huntonprivacyblog.com/2014/03/articles/european-parliament-adopts-draft-general-data-protection-regulation-calls-suspension-safe-harbor/> .

a statute, their discovery or subpoenas may not be held valid. This would also protect the common man from unauthorized tapping of their brainwaves.

European law also protects personal data in relation to communications under EC Regulation No. 45/2001⁷² as Article 5 articulates the requirements for “processing personal data” which requires consent or judicial/government sanction. Before this regulation which is binding upon European Union member-States was issued, EC Directive 95/46/EC⁷³ and EC Directive 97/66/EC⁷⁴ required member-States to uphold the freedom of natural persons in particular right to their respective privacy extending to telecommunications. Directives are not binding in nature and must be domestically implemented by the member-State so a E.U. Regulation, which is binding, is much more effective in protecting the personal information or data when we view brainwaves as a form of communication. As mentioned, European Union Petition 1168/2003 tried to expressly ban electromagnetic weapons but the process did not move forward due to lack of political will.

International Law

International law on intellectual property rights is a developing area as there is no current way of enforcing intellectual property rights internationally despite the

conventions in existence. Only in the domestic courts may intellectual property rights may be enforced as the Berne Convention gives all republication rights to the author. However, international legislation for trademarks is much more effective with the “Madrid Protocol” as registration of your trademark will result in judgment of one court enforceable in the 92 member-States of the U.N. that have signed the protocol⁷⁵. This is because when a trademark is registered under the Madrid Protocol, all member-States are involved to approve the application and may take up to 18 months to approve it. The same cannot be said for the Berne Convention.

However, with both conventions, brainwaves would not be applicable both viewed anatomically and as electronic data unless the convention is amended to include the phrase of electromagnetic devices and protection of intellectual property in relation to these devices. While this has not been done yet, progress towards this end has been made in the E.U. as new legislature regarding data protection can be introduced under the Lisbon Treaty⁷⁶ based on Article 16 of the “Treaty on the Functioning of the European Union”⁷⁷. So, additional steps to protect data from electromagnetic devices such as in the proposed amendments for the U.S. ECPA must be introduced in amending or adding on to the “Draft General Data Protection

⁷² REGULATION (EC) NO 45/2001 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL OF 18 DECEMBER 2000 ON THE PROTECTION OF INDIVIDUALS WITH REGARD TO THE PROCESSING OF PERSONAL DATA BY THE COMMUNITY INSTITUTIONS AND BODIES AND ON THE FREE MOVEMENT OF SUCH DATA (Official Journal of the European Union 2000), <http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32001R0045>.

⁷³ DIRECTIVE 95/46/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL OF 24 OCTOBER 1995 ON THE PROTECTION OF INDIVIDUALS WITH REGARD TO THE PROCESSING OF PERSONAL DATA AND ON THE FREE MOVEMENT OF SUCH DATA (Official Journal of the European Union 1995), <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:31995L0046:en:HTML>.

⁷⁴ DIRECTIVE 97/66/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL OF 15 DECEMBER

1997 CONCERNING THE PROCESSING OF PERSONAL DATA AND THE PROTECTION OF PRIVACY IN THE TELECOMMUNICATIONS SECTOR (Official Journal of the European Union 1998), <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:31997L0066:EN:HTML>.

⁷⁵ THE MADRID PROTOCOL (Smith, Gambrell & Russell LLP 2003), http://www.sgmlaw.com/resources/trust_the_leaders/leaders_issues/ttl6/911/.

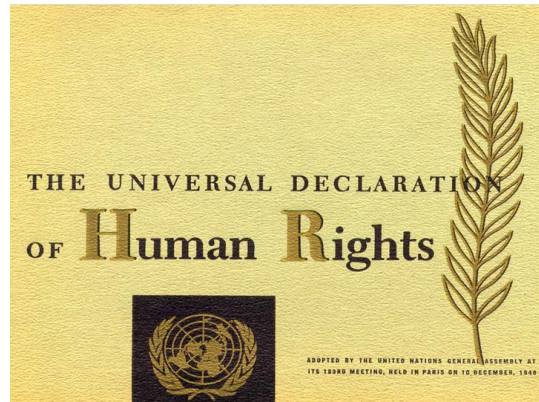
⁷⁶ TREATY OF LISBON Official Journal of the European Union, <http://eur-lex.europa.eu/legal-content/EN/ALL/?uri=OJ:C:2007:306:TOC>.

⁷⁷ TREATY ON EUROPEAN UNION AND THE TREATY ON THE FUNCTIONING OF THE EUROPEAN UNION (Official Journal of the European Union 2012), <http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:12012E/TXT>.

Regulation” protecting “biometric data” and “genetic data” viewing brainwaves as “electronic communication” and data. A better way to look at protection would be to look at this issue from a human rights perspective to protect the human body but as mentioned before, the burden of proof to show the existence of the electromagnetic device would lay upon the victim.

Also as mentioned before, the UDHR and ICCPR which makes up the “International Bill Of Human Rights” are the most relevant to protecting the rights of one’s brain in relation to free thought, freedom of expression, right to life, and a reasonable expectation of privacy. The right to life is generally overlooked when electromagnetic devices are brought up as there have been no reported deaths so far from them as most of the victims are tortured and inflicted serious harm but the guarantee to life must also be considered as these devices are life threatening. Under international law, conceptualizing the administrative and procedural system of the Berne Convention or Madrid Protocol would not be desirable for a new convention to protect data which is emitted from the brain. The availability of an individual or state to invoke universal jurisdiction or *jus cogens* must be included in the convention as it will be the only way to most effectively protect your “brain rights” worldwide similar to the enforcement of the “1948 Convention on the Prevention and Punishment of Genocide”.

The “1984 U.N. Convention against Torture (CAT)” is of this nature with regards to *jus cogens* and would also be an equal administrative system to utilise especially with the potential for torture using these electromagnetic devices. Article 1 of the CAT prohibits torture in full while Articles 20 allows for the U.N. Human Rights Commission to act on individual claims and Article 23 allows for member-State party to the Convention to refer another member-State for torture which has occurred. Just last year, another optional protocol was



introduced at the U.N. while very few states have signed it and once again, it fails to mention the torture via electromagnetic devices which is essential to lift the burden of proof from the victim. A victim should not have the burden of proving his own torture by public officials which is why international mechanisms at the U.N. Human Rights Council such as the individual complaint process must be invoked to provide oversight on member-State public officials who engage in torture. While violations of the “U.N. Chemical Weapons Convention (CWC)” cannot invoke *jus cogens* as it is not a human rights issue but one of international humanitarian law, introducing a similar U.N. Convention Against Electromagnetic Devices which can invoke *jus cogens* in light for its potential of use for torture and which expressly states to protect brainwaves would be the most efficient way for protection under international law. Any country, group, or individual that uses psychotronic weapons and/or for the purpose of monitoring brainwaves should be referred to the U.N. unless it is decided that these weapons are lawful during the time of war in relative to IHL. All countries signatory to these conventions have obligations and when they are violated, the U.N. Human Rights Council (UNHRC) and other U.N. bodies such as the International Court of Justice (ICJ) may be utilized to enforce the convention.

When approaching the ICJ for an advisory opinion on a suggestion of how to protect brainwaves with this new technology, its advisory judgments are automatically

bound by Article 94 (1) of the U.N. Charter. If they are not followed, under Article 94 (2) of the U.N. Charter⁷⁸, the matter may be referred to the U.N. Security Council for action and even upon a veto, U.N. General Assembly Resolution 377, the “Uniting For Peace Resolution”⁷⁹, can override a veto with 2/3rd majority in the General Assembly although human rights issues have vastly gained importance in recent times. Under international law, without approaching the ICJ for an advisory opinion expressly stating electromagnetic weapons in the dicta which will add to customary international law, the only option is to introduce a U.N. Convention banning such technology for harmful and civilian use. The ICJ is open to all member-States of the United Nations and has also been used by individual civilians such as Dr. Garry Davis, the founder of the “World Passport” so there could be a case to build for individuals who have sufficient *locus standi* to approach the court if the ICJ considers “stateless” people as a “state” as Dr. Garry Davis argued.

For the rest of the world, counting on the drafting of a U.N. Convention Against Electromagnetic Devices is a must and will have to start of recognizing the fact that these devices have the possibility to cause death, potential for misuse by law enforcement agencies for illegal surveillance through tapping “biometric and genetic data” in brainwaves, torture, and medical experimentation without consent which is illegal under international law. With such a convention in place to protect thought, pragmatism would greatly be increased leading to thoughts that contribute to society instead of by offering the incentive of protection and credit to think of creative ideas to the problems that plague our world today. The philosophy of thought must be realized to benefit the average civilian for international law to have positive effects on

the economic, cultural, and political growth of a nation. When our thoughts are not protected and one thinks of irrational beliefs, it does not benefit anyone. Thus, international law is linked with the pragmatic philosophy and utilitarian philosophy as benefits are derived from thoughts through legal protection; the very foundation of intellectual property.

IV. Conclusion

The protection of intellectual property rights and human rights has to be kept up with new technological advances in signal intelligence and technology in general. The U.S and international law have long ways to go before being able to defend the common man from the new technologies; some which are very harmful and require the immediate attention of the international community. The European Union has made progress towards this end and it will be up to member-States to implement domestic legislation. In addition, international organizations such as the United Nations and WIPO will be at the frontline of innovative ways to take up the challenge of protecting the data embedded in our brainwaves for the rest of the international community in the view of both human rights law and intellectual property law.

⁷⁸ UNITED NATIONS CHARTER (United Nations 1948), <http://www.un.org/en/documents/charter/chapter14.shtml>.

⁷⁹ 377 (V). UNITING FOR PEACE (United Nations 1950), <http://unispal.un.org/UNISPAL.NSF/0/55C2B84DA9E0052B05256554005726C6>.

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