ILLINOIS STATE BAR ASSOCIATION

FEBRUARY 2020 VOL 59 NO. 3

Intellectual Property

The newsletter of the Illinois State Bar Association's Section on Intellectual Property Law

Starlink and Mega Constellations: Finding a Viable Legal Solution

BY CHARLES LEE MUDD, JR.

The first launch of SpaceX Starlink satellites in 2019 prompted significant outcry about the effects the Starlink mega[1] constellation system could have on our night sky. The images of Starlink satellites streaking across the dark night certainly suggested the degradation of unfettered star gazing. Indeed, the astronomical community quickly voiced concerns that the Starlink mega constellation would degrade both optical and radio astronomy. Since then, critics of Starlink point to the Federal Communications Commission's ("FCC") "failure" to conduct or require an environmental assessment that included astronomical concerns. In fact, some critics advocate litigation against the FCC or SpaceX. While there exist well-founded concerns about Starlink, litigation would be misguided, ineffectual, and possibly counter-productive *at this time*. Consequently, immediate focus should rather be directed toward advocacy, education, and policy change.

SpaceX and Starlink

SpaceX represents one of the most innovative and forward thinking companies in the commercial space

Continued on next page

Political Trade Secrets: Intellectual Property Defense to Political Hacking

BY DANIEL KEGAN

Confusion, deception, and mistake are generally unlawful in marketing campaigns. 14 USC § 1125 (a) [Lanham Act § 43(a)]. Yet confusion, deception, and mistake are typically lawful in political campaigns. US Const. Amend. I[1] US Const. Amend. XIV.[2] Our democratic republic assumes informed and participating citizens. Yet judicial fairness recognizes some evidence is privileged against disclosure.[3]

"Political advertising and promotion is political speech, and therefore not encompassed by the term 'commercial.' This is true whether what is being promoted is an individual candidacy for public office, or a particular political issue or point of view."[4] Not only are many political torts excused from principal commercial fair dealing laws, elections and their certifications are often concluded well before a final judgment is typically available[5]. Moreover, courts disfavor

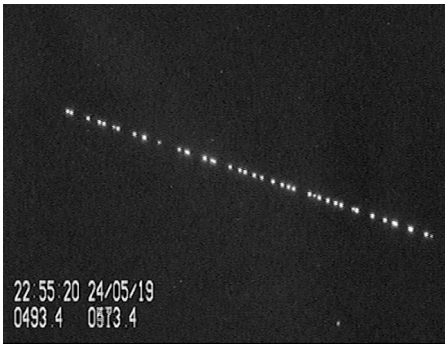
Continued on page 6

Starlink and Mega Constellations: Finding a Viable Legal Solution

CONTINUED FROM PAGE 1

industry. Through its Falcon rockets, SpaceX introduced, demonstrated, and implemented reusability of launch rockets in space launches. Videos of its rockets returning to Earth and landing upright compel awe. It regularly sends supplies to the International Space Station ("ISS") through its reusable Dragon cargo spacecraft. SpaceX also plans a manned mission with the Crew Dragon in the near future.

On May 23, 2019, SpaceX launched the first set of sixty (60) Starlink satellites.[2] These satellites comprise but a small portion of the larger Starlink mega satellite constellation. Until the launch, or, more accurately, images of the launch, most people had not heard of Starlink or satellite constellations. However, with the satellites visibly streaking across the sky, an outcry of



concern quickly emerged.[3]

Image used with permission of Marco Langbroek https://sattrackcam.blogspot.com/.[4]

In particular, the astronomical community raised concerns that the Starlink satellites could negatively affect optical and radio astronomy. AAS Issues Position Statement on Satellite Constellations (June 10, 2019), https://aas.org/press/aas-issues-position-statement-satellite-constellations (last visited February 13, 2020); The Impact of Mega-Constellations of Communications Satellites on Astronomy (February 7, 2020) https://www.unoosa.org/documents/pdf/copuos/stsc/2020/tech-35E.pdf. For, even post-launch, the Starlink satellites create a "train" clearly visible:

Images used with permission of Marco Langbroek https://sattrackcam.blogspot.com/.[5]

While sixty satellites might not seem significant, the Starlink mega constellation will involve thousands of satellites. To date, SpaceX sought and obtained FCC approval for 12,000 Starlink satellites. 33 FCC Rcd 3391 (4) (FCC 18-38, authorizing the original 4,425); 33 FCC Rcd 11434 (17) (FCC 18-161, authorizing an additional 7,518). On behalf of SpaceX, the FCC seeks authorization for an additional 30,000 with the International Telecommunication Union ("ITU"). This staggering increase in the number of satellites should cause regulators to pause and consider its impact on any number of variables.

For perspective, there currently exist around 5,000 active and dormant satellites orbiting Earth. Space Debris by the Numbers, https://www.esa.int/Safety_Security/Space_Debris/Space_debris_by_the_numbers (last visited February 12, 2020). Of these, approximately 2200 constitute active satellites. UCS Satellite Database https://www.ucsusa.org/resources/satellite-database (last visited February 12, 2020).

Intellectual Property

This is the newsletter of the ISBA's Section on Intellectual Property. Section newsletters are free to section members and published at least four times per year. Section membership dues are $30 per year.

To join a section, visit www.isba.org/sections or call 217-525-1760.

OFFICE
ILLINOIS BAR CENTER
424 S. SECOND STREET
SPRINGFIELD, IL 62701
PHONES: 217-525-1760 OR
800-252-8908
WWW.ISBA.ORG

EDITOR
Daniel Kegan

PUBLICATIONS MANAGER
Sara Anderson
✉ sanderson@isba.org

Considering SpaceX represents but *one company* from *one country* seeking to launch satellite constellations, the broader international impact and potential launch of satellite mega constellations from multiple companies and countries cries for serious policy considerations. Indeed, beyond the impact on optical and radio astronomy, the number of objects raises concerns associated with space debris[6] and space traffic management.

Given the foregoing, one reasonably could wonder how SpaceX obtained approval for Starlink from the FCC.

Starlink and the FCC

SpaceX did not launch its Starlink satellites without government approval. Rather, SpaceX filed applications with the FCC that became available for public comment. Interestingly, no one raised objections of an astronomical nature in any comments filed in response to the original Starlink applications. In any case, following the close of the public comment period, the FCC approved SpaceX's Starlink applications. 33 FCC Rcd 3391 (4); 33 FCC Rcd 11434 (17).

In filing its applications with the FCC, SpaceX responded to a standard inquiry that there would be no "significant environmental impact as defined by 47 CFR 1.1307." Section 1.1307 constitutes a part of the FCC regulations implementing rules issued by the Council on Environmental Quality ("CEQ") under the National Environmental Policy Act ("NEPA"). 47 CFR § 1.1307; 40 CFR § 1500-1508, 1515-1518 (Council on Environmental Quality regulations). The FCC promulgated the implementing regulations in 1986. At the time, the FCC stated:

> Based upon the Commission's experience, we have determined that the telecommunications industry does not generally raise environmental concerns. The comments filed in this proceeding support the Commission's determination. Thus, we have categorically excluded most Commission actions from environmental processing requirements.

51 Fed. Reg. 14999. It further stated that:

> The Commission has reduced to three general areas the types of actions that may have a significant environmental impact to include cases in which facilities: (1) Will be located in sensitive areas (e.g. wildlife preserves); (2) will involve high intensity lighting in residential areas; and/or (3) will expose workers or the general public to levels of radiofrequency radiation which would exceed the applicable health and safety standards set forth in § 1.1307(b) of our rules.

Id. Apart from the foregoing, the FCC could require environmental processing "on a case-by-case basis." *Id.* at 15000. Section 1.1307 has not been amended since. 47 CFR § 1.1307.

Starlink Litigation Not *Currently* a Solution

Three reasons dictate against litigation being a viable solution to contest the FCC approval of Starlink. First, the existing regulations do not include or require consideration of astronomical concerns. Second, any party objecting to Starlink based on such concerns likely lacks standing at this juncture. Finally, any litigation could be used against efforts to obtain the policy changes actually necessary.

Current Environmental Concerns

Here, Starlink does not invoke any of the three general areas requiring an environmental assessment under 47 CFR § 1.1307. See *id.* It does not involve terrestrial facilities located in sensitive areas; lighting in residential areas; or, radiation exposed to workers or the general public. *Id.* Consequently, SpaceX properly indicated there would be no "significant environmental impact as defined by 47 CFR 1.1307." 47 CFR § 1.1307. And, by requiring an applicant to provide such indication, the FCC complied with its regulations and those of the CEQ.[7] Consequently, there does not exist a *significant* basis to allege in litigation that either SpaceX or the FCC failed to consider the applicable environmental considerations.

At best, one could attempt to argue that the visual effect of the satellites on the dark sky requires an environmental assessment in the same manner as an antenna structure that visually affects an historical property. Filing an Environmental Assessment in the Antenna Structure Registration (ASR) System, https://www.fcc.gov/wireless/support/antenna-structure-registration-asr-resources/filing-environmental-assessment (last visited February 11, 2020). While certainly a creative argument, it might not be significantly persuasive. That being said, it does demonstrate that the FCC considers visual impact in certain contexts. And, whether successful or not, the use of the argument could compel an acknowledgment that existing regulations do not sufficiently encompass the effect of satellites on the dark sky and other astronomical concerns.

Standing Likely Barrier

Nonetheless, a party raising the argument for *the first time* may not possess sufficient standing to file the suit. Indeed, the Ninth Circuit has held that "absent exceptional circumstances, it will decline to consider specific issues that were not raised at all before the agency during the administrative process." *Kunaknana v. United States Army Corps of Eng'rs*, 23 F. Supp. 3d 1063, 1087 (D. Alaska 2014). Thus, a party must demonstrate that the applicable agency was aware of the specific issue. *Id.* at 1088. In fact, although the Communications Act authorizes "'any . . . person . . . aggrieved or whose interests are adversely affected' . . . to sue for relief," the person "must comply with prescribed administrative procedures." *Coalition for Preservation of Hispanic Broadcasting v. FCC*, 931 F.2d 73, 76 (D.C. Cir. 1990). In the case of a party who did not participate in the agency proceedings, 47 U.S.C. § 405 requires such party "to petition the Commission for reconsideration of disputed orders" within thirty (30) days of public notice of the order being given by the FCC. *Id.*; 47 U.S.C. § 405(a). Absent this, a party will be generally barred from seeking judicial review of FCC orders. *Id.*

In fact, for certain "covered projects"[8] under the NEPA, any party seeking to file

an action "pertaining to an environmental review conducted under NEPA" must have "submitted a [sufficiently detailed] comment during the environmental review." 42 U.S.C. § 4370m-6(a)(1). In this context, an "environmental review" "means the agency procedures and processes for applying a categorical exclusion or for preparing an environmental assessment, an environmental impact statement, or other document required under NEPA." 42 U.S.C. § 4370m(11). Consequently, were this statute applicable in the context of an environmental assessment of Starlink in the FCC licensing process, a comment must have been filed[9] during the public comment period for the Starlink application.[10]

Consequently, any plaintiff bringing an action challenging the FCC's order approving SpaceX' Starlink application must demonstrate it exhausted administrative remedies. See Coalition for Preservation of Hispanic Broadcasting, 931 F.2d at 76. At the very minimum, in the context of objecting to Starlink's effect on the night environment, it must demonstrate that the specific issues of astronomical or dark sky concerns had been brought before the FCC during the application process. See Kunaknana, 23 F. Supp. 3d at 1087-1088. Absent such a demonstration, any party filing a lawsuit related to concerns under NEPA will not have sufficient standing to seek judicial review. See *id.*

Avoiding Bad Precedent

Apart from viability and standing concerns, any litigation filed contending SpaceX or the FCC failed to comply with existing regulations in assessing Starlink will implicitly suggest that the current regulatory regime suffices to accommodate astronomical and dark sky concerns. It does not. Consequently, there exists a danger that court documents and the arguments contained therein could later be used to counter the need for regulatory amendments. Moreover, litigation filed under existing circumstances could result in precedent that would be adverse to regulatory amendments and future efforts to impose astronomical and dark sky concerns. Therefore, at this juncture, litigation focused on Starlink does not constitute the most practical and strategic means of addressing astronomical and dark sky concerns.

Broader Litigation a Possibility

That being said, a viable argument might exist that NEPA and the CEQ implementing requirements require the FCC (and other agencies) to sufficiently assess and update their regulations to comply with the purpose and intent of NEPA. Indeed, NEPA makes very clear that:

> . . . it is the continuing responsibility of the Federal Government to use all practicable means, consistent with other essential considerations of national policy, to improve and coordinate Federal plans, functions, programs, and resources to the end that the Nation may (1) fulfill the responsibilities of each generation as trustee of the environment for succeeding generations; (2) assure for all Americans safe, healthful, productive, and esthetically and culturally pleading surroundings; (3) attain the widest range of beneficial uses of the environment without degradation, risk to health or safety, or other undesirable and unintended consequences; …

42 U.S.C. § 4331(b). Further, NEPA suggests an ongoing obligation to accommodate future "environmental amenities and values" by providing that

> . . . to the fullest extent possible: (1) the policies, regulations, and public laws of the United States shall be interpreted and administered in accordance with the policies set forth in this chapter, and (2) all agencies . . . shall-
>
> * * * * *
>
> (B) identify and develop methods and procedures, in consultation with the [CEQ], which will insure that presently unquantified environments; amenities and values may be given appropriate consideration in decisionmaking along with economic and technical considerations;

42 U.S.C. § 4332.[11] The CEQ implementing regulations impose this same obligation. 40 CFR § 1507.2(b). And, the CEQ regulations explicitly state that, following initial efforts to comply with [NEPA], "[a]gencies shall continue to review their policies and procedures and in consultation with the Council to revise them as necessary to ensure full compliance with the purposes and provisions of [NEPA]." 40 CFR 1507.3.

Considering the foregoing, by failing to amend § 1-1307 for more than 30 years, and relying on antiquated reasoning articulated in 1986, the FCC arguably has failed to meet such obligations. See 42 U.S.C. §§ 4331(b), 4332; 40 CFR 1507.3. Assuming this to be the case, a lawsuit against the FCC could be filed seeking to compel it to update the regulations to accommodate the changed circumstances of today. This claim might very well circumvent the standing issue (as it goes beyond any specific public comment period) and enable injunctive relief precluding any FCC decisions under existing regulations or future launches under existing decisions.

Barring the viability of the foregoing argument that the FCC has failed to comply with an obligation to continually assess and update its regulations, litigation will not be an effective remedy for addressing what has already occurred and/or been authorized. Consequently, efforts must be directed toward education, advocacy, and policy change.

Changing Applicable Environmental Considerations

As existing FCC environmental considerations do not include astronomical or dark sky impacts, focus should be made on changing the applicable environmental considerations. To begin with, the FCC should reassess the operations under its purview that could have an environmental impact. Any application or operation involving satellites or the placement of objects in space should provide an assessment on how such application or operation will affect space for specific communities (eg astronomical) and the general public. As an independent commission, the FCC need not wait for

direction to do so. At the minimum, the FCC should include on its own accord astronomical and dark sky concerns within the scope of environmental impact. Quite simply, the FCC could amend § 1.1307 to include:

> (e) Commission actions with respect to the launch and/or operation of satellites or other objects in space (regardless of orbit position and/or trajectory) require the preparation of an Environmental Assessment (by the applicant or the Commission, as the case may be) on how such launch, object, and/or operations will affect specific communities using space (eg astronomical) and the broader enjoyment of space by the general public.

Additionally, the Council on Environmental Quality should mandate that the environment include any effect on space. Indeed, in February 2020, the CEQ will have held hearings on proposed changes to its regulations.[12] The CEQ provided the general public with the opportunity to listen or speak on the proposed changes. https://ceq.doe.gov/laws-regulations/regulations.html (last visited February 11, 2020). An opportunity also exists to submit written comments. Id.

Arguably, Congress should amend NEPA to explicitly make clear that it requires agencies to conduct regular assessments of its policies, procedures, and regulations to ensure compliance. Interested parties should also lobby legislators to enact laws mandating the requirement of an environmental assessment addressing astronomical and dark sky concerns for any application seeking to launch objects to space. In similar manner, many countries have adopted standards for space debris mitigation through end-of-life contingencies. "Compendium of Space Debris Mitigation Standards Adopted by States and International Organizations," UNOOSA, https://www.unoosa.org/oosa/en/ourwork/topics/space-debris/compendium.html (last visited February 13, 2020). In fact, even the FCC provides regulations providing for end-of-life disposal. 47 C.F.R. § 25.283(a).

Additional Bases for Advocacy … and Future Litigation

Until such time as the applicable environmental considerations and regulations have been changed, additional bases exist for advocating an assessment of astronomical and dark sky concerns. To begin with, any interested parties should file a comment, opposition, or, where applicable, a petition to deny any satellite application that could adversely affect such concerns.[13] While the regulations may not require an assessment by the applicant, nothing precludes such issues being raised before the FCC and other regulatory agencies. Indeed, arguments on these issues could prompt the FCC to exercise its "safety valve" and require the submission of an environmental assessment. 47 CFR § 1.1307.

Conclusion

While litigation may bring attention to this issue, it does not serve as the most practical means to effectuate necessary change. As argued above, neither SpaceX nor the FCC violated applicable regulations in approving Starlink. They addressed the Starlink applications under the existing regime of environmental considerations. As also argued above, the applicable environmental considerations remain woefully inadequate to address the impact of satellites in an era of smallsats, mega constellations, and the general commercialization of space. Consequently, rather than reactive litigation to what has already occurred, focus must be made on proactive efforts to effectuate policy change. Then, should an agency fail to act or properly address matters brought to its attention through the comment process, litigation might very well be an appropriate vehicle.■

CLM@MuddLaw.com.

1. A satellite constellation system can be comprised of any number of satellites connected within the same system. A "mega" constellation system typically will be considered to include thousands of such satellites connected with one another.
2. A Starlink satellite measures 4.0m (length) x 1.8m (width) x 1.2m (height) where the dimensions of each satellite's two (2) solar arrays occupy an area of $12m^2$ (6.0m (length) x 2.0m (width)). SpaceX Non-Geostationary Satellite System, Attachment A: Technical Information to Supplement Schedule S. https://licensing.fcc.gov/myibfs/download.do?attachment_key=1158350.
3. A particular aspect of the Starlink satellites relates to their reflective coating. Since the initial launch and public outcry, SpaceX indicated that it would explore using less reflective coating.
4. The specific source for the image: https://1.bp.blogspot.com/-XVzhMVg7O5c/XOiU74MbwOI/AAAAAAAAFuM/o_luSi91VRUN25vp88n2zxkJLSOE-BkzRwCLcBGAs/s1600/Snapshot%2B-%2B2.png.
5. The specific source for the images: https://1.bp.blogspot.com/-33LsSDC-ZV74/XiQcZV0ZCmI/AAAAAAAAF_E/EoVRhHSTHg8x2NWYDDJ3xuHrFIG-pzaaCQCEwYBhgL/s1600/Starlink2_s20200118_stack_10_images_175930_180030UT_79_88.jpg and https://1.bp.blogspot.com/-H7bZ1TVjips/XiQcdLcXebI/AAAAAAAAF_c/fuy7GnK0kK41iMc7K-vk1_TVKM5MpV-U8QCEwYBhgL/s1600/Starlink2_s20200118_175250_175910UT_stack_65_images_15_78.jpg. In the second image, the "train" appears from lower right to upper left.
6. Although beyond the scope of this article, an interesting exercise would be to determine the effect Starlink's satellites would have on the Kessler Syndrome self-sustaining, cascading collision of space debris. In fact, even with less than 250 Starlink satellites launched, the European Space Agency ("ESA") diverted one of its satellites to avoid collision with a Starlink satellite. ESA Spacecraft Dodges Large Constellation, ESA, September 3, 2019 (https://www.esa.int/Safety_Security/ESA_spacecraft_dodges_large_constellation) (last visited February 16, 2020.
7. Where an environmental assessment is required of an applicant, the FCC must still "make its own evaluation of the environmental issues and take responsibility for the scope and content of the environmental assessment." 40 CFR § 1506.5. But, again, the current FCC regulations do not encompass "space" within the scope of "environment." Thus, the FCC arguably made its assessment under its current (and long-standing) perspective of environmental considerations applicable to its operations. 51 Fed. Reg. 14999; 47 CFR § 1.1307.
8. Arguably, the application to launch a satellite or satellites does not constitute a "covered project" under 42 U.S.C. § 4370m-6.
9. Implicitly, a party seeking injunctive relief under 42 U.S.C. § 4370m-6(b) must meet the standing requirements under (a). 42 U.S.C. § 4370m-6. Of course, a party with concerns that had not been raised in a comment might explore collaboration with a third party that had filed a comment during the applicable period. However, given the comment would need to have been "sufficiently detailed," a court might limit the bases for litigation to those contained within the filed comments. Nonetheless, such collaboration might serve as a viable means of raising novel concerns.
10. Clearly, a party raising concerns about the mega satellite constellations at issue would not have known to make a comment at the time the FCC considered the categorical exclusions in 1986.
11. But for the deadline of 1971, 42 U.S.C. § 4333 could be interpreted as an ongoing obligation to review "present" administrative regulations. By amending § 4333 to explicitly make it an ongoing obligation, NEPA would ensure that agencies must regularly review regulations to comply with NEPA. Yet, it would still be ideal that NEPA and CEQ acknowledge space as an integral component of the environment – particularly for item sent to space.
12. In the entire proposed changes, the word "space" occurs once in a different context. CEQ Regulations-proposed rule redline (CEQ-2019-0003-0012) (https://ceq.doe.gov/laws-regulations/regulations.html) (last visited February 11, 2020). "Astro" does not appear at all. Id.
13. The FCC portal to search applications in the international bureau can be reached at https://licensing.fcc.gov/cgi-bin/ws.exe/prod/ib/forms/reports/swr030b.hts?set= or the short cite http://mlo.bz/fccadvsearch. Comments can be filed at http://licensing.fcc.gov/myibfs (registration may be required). All filings must comply with the FCC rules found at 47 CFR § 25.154.

Political Trade Secrets: Intellectual Property Defense to Political Hacking

CONTINUED FROM PAGE 1

involvement in political disputes.[6]

Government transparency is encouraged by Freedom of Information laws[7], and by Congressional investigative powers.[8] While "Congress cannot constitutionally inquire 'into the private affairs of individuals who hold no office under the government' when the investigation 'could result in no valid legislation on the subject to which the inquiry referred,'[9] the Congressional investigative power, typically delegated to a committee, supports Congress' legislative function and is a key element of the Constitution's checks and balances.

Unlike copyrights, trademarks, and patents, there is no general system for registering a trade secret. A trade secret is information that has independent economic value from not being generally known and for which the owner has taken reasonable measures for it to maintain secret.[10] Until the recent federal Defend Trade Secrets Act (DTSA),[11] trade secret law in the USA was provided by the separate states, similar to the Uniform Trade Secrets Act[12] but with individual state enactments, and individual state case law.[13]

The DTSA extended the Economic Espionage Act of 1996 (EEA), which criminalized some trade secret misappropriations.[14] Unlike the Espionage Act of 1917,[15] the EEA covers commercial information, not classified or national defense information. However, EEA trade secret theft is limited to "a product," while its economic espionage requires knowledge or intent that the theft will benefit a foreign power.[16]

In contrast with our nation's farmer framers, the contemporary USA economy is dominated by services, not goods. According to a US Bureau of Economic Analysis study, in 2009 services accounted for 80% of US private-sector gross domestic product (GDP), $9.8 trillion. Service jobs accounted for more than 80% of US private-sector employment, 90 million jobs.[17] The EEA is inadequate to protect trade secreats in the bulk of our current economy.

Reflecting the increased commercial saliency of trade secrets, Article 39 of the Agreement between the United States of America, the United Mexican States, and Canada (USMCA) explicitly mandates protection of trade secrets and preventing disclosure contrary to" honest commercial practices."[18]

Paralleling the increasing salience of digital data and commercial trade secrets, protecting personal privacy and personal information are increasingly of concern to both individuals and regulators.[19]

The Internet now pervades not only the USA economy but much of the world's economy and lifestyles. Internet predecessor ARPANET first connected two network nodes 29 October 1969: UCLA and SRI in Menlo Park CA.[20] In 1982 the Internet Protocol Suite (TCP/IP) was standardized, permitting worldwide Internet connections. With a 2017 world population of 7.4 billion people, 48% are now Internet users; 81% in the developed world and 41% in the developing world.[21]

Before computer-specific criminal laws, computer crimes in the USA were usually prosecuted, when they could be, as mail and wire fraud, a federal crime since 1872.[22] Mail and wire fraud requires a) intent; b) a "scheme or artifice to defraud" or the obtaining of property by fraud; and c) a mail or wire communication.

The Computer Fraud and Abuse Act (CFAA), enacted 1984, prohibits accessing a computer without, or in excess, of authorization, in limited circumstances.[23] The statute is limited to "information contained in a financial record or a financial institution or of a card issuer, or contained in a file of a consumer reporting agency on a consumer; information from any department or agency of the USA, or information from any protected computer." A "proteacted computer" is used by or for a financial institution or the US Government or is used in or affects interstate or foreign commerce or communication.[24]

A CFAA "loss" is defined as "any reasonable cost to any victim, including the cost of responding to an offense, conducting a damage assessment, and restoring the data, program, system, or information to its condition prior to the offense, and any revenue lost, cost incurred, or other consequential damages incurred because of interruption of service." Most courts have interpreted CFAA loss as costs that flow directly from the access, such as service interruption. Copying information may not create a CFAA loss. The statute of limitations is two years.

The CFAA requires a minimum of at least $5,000 damage sustained during a one-year period. CFAA damage is defined as "any impairment to the integrity or availability of data, a program, a system of information." Damages available under CFAA are more limited than under a trade secret claim, and do not include the value of the misappropriated information, nor does CFAA provide for exemplary damages.

Hacking into the computer of a political candidate, official, or party and disseminating the information is not readily covered by USA statutes before the DTSA was enacted. Maintaining political information confidential, attempts to "hack" into it, and disinformation have been part of our political system since at least the nation's founding[25]. DTSA provides a potential cause of action—and potentially a strong, albeit delayed, remedy.

The Senate Select Committee on Intelligence, in its Worldwide Threat Assessment of the US Intelligence Community, 29Jan2019) lists "Cyber" as the first of ten global threats[26]: "Our adversaries and strategic competitors will increasingly use cyber capabilities—including cyber espionage, attack, and influence—to seek political, economic, and military advantage over the United States and its allies and partners."[27],[28]

The hacks into computers of Democratic candidate Hilliary Clinton[29], party Democratic National Committee[30], and official John Podesta[31], have spawned the Justice Department Special Counsel investigation[32], headed by Robert Mueller, Congressional investigations, over thirty indictments and several high-profile convictions[33]. Republican emails have also been hacked.[34] Yet prision sentences and

financial forfeiture[35] to the government don't compensate the hacked victims. The Defend Trade Secrets Act might help.

After a hack of political information, balanced dissemination should not be expected[36]. More common are intentional falsification, predicate innuendo, negative advertising[37], and often media blitz very shortly before the election day.[38] Harsh responses to one's disfavored political positions too often displace civility and rational discourse, emulating Gresham's Law of bad money displacing the good.[39] Representative Preston Brooks (SC) brutally caning Senator Charles Sumner (MA), 22 May 1856, over Sumner's speech for Kansas being admitted to the Union as a free state is a salient example.[40]

Given a court finding of misappropriation, a court may award damages.[41] Given a court finding of willful and malicious misappropriation, exemplary damages up to double may be awarded.[42] The EEA, of which the DTSA became a part, provides that the law applies to conduct outside the United States if: a) the offender is a citizen or permanent resident of the USA, b) the offender is a USA corporation, or c) an act furthering the offense was committed in the USA.[43]

The federal conspiracy statute is broad, its reach may include actors for whom other evidence of committing a substantive crime might be difficult to obtain.[44] Federral conspiracy is a continuing offense. Its statute of limitations, five years, begins on the date of the last overt act, by anyone in the conspiracy.[45] A conspiracy is deemed to continue until its purpose is achieved or abandoned. An individual's "withdrawal" from a conspiracy starts the statute of limitations running for that individual. Withdrawal from a conspiracy for limitations purpose requires the conspirator to take affirmative action by full disclosure to authorities or communicating his or her disassociation to the other conspirators.[46]

Now, with the Defend Trade Secrets Act, a hacker, the knowing disseminator, and all involved in the conspiracy may be subject to significant damage awards.[47] The damage of unauthorized dissemination of political campaign information is not measured by lost sales or the tortfeaser's wrongful profits. Nor would the salary of the involved political office likely be an appropriate measure very often.

The Copyright Act provides a model procedure for determining damages.[48] For political trade secret liability, in establishing the damage to plaintiff trade secret owner, the plaintiff may be required to present proof only of the defendant's campaign expenses, including unpaid debts, plus unspent contributions and the infringer would be required to prove any damage apportionment claimed not due to the trade secret tort.[49] For many political campaigns federal and state laws require periodic report of campaign expenses and contributions.[50]

One measure of the damage could be the total amount spent, including unpaid debts, plus unspent contributions in the campaign by the candidate or referendum campaign, supported, explicitly or implicitly, by the tortfeasor. If the defendant does not provide its full expense and contribution information, then plaintiff's expense and contribution amounts might be used, with no apportionment by defendant. Hacking and dissemination of likely stolen political information will usually be found to be willful and malicious, supporting double damages.

An effective DTSA litigation may not immediately reverse an election result, but it might severely weaken the conspirators[51]. *Gertz v Robert Welch, Inc,* 418 US 323 (1974); cert denied, 459 US 1226 (1983). (John Birch Society defamation of private citizen in the public media).■

<daniel@kganlaw.com>,

Originally published, American Bar Association, 29 Intellectual Property Litigation, Issue 1, Spring (May) 2019, reprinted with author's permission.

1. "Congress shall make no law...abridging the freedom of speech, or of the press."
2. "No State shall make or enforce any law which shall abridge the privileges or immunities of citizens of the United States; nor shall any State deprive any person of life, liberty, or property, without due process of law; nor deny to any person within its jurisdiction the equal protection of the laws."
3. FedRCivP 501.
4. 134 Cong. Rec. H 1297 (daily ed. April 13, 1989) cited in *MasterCard International, Inc. v Nader* 2000, 70 USPQ2d 1046 (SD NY 2004) (Candidates use of "priceless" ad parody was political speech, thus categorically exempt from coverage by the Federal Trademark Dilution Act
5. Political disputes have spawned defamation lawsuits. Although rarely concluded quickly, sometimes the awarded damages can be substantial. Eg, *Thomas v Page,* 837 NE2d 483, 361 IL App3d 484 (2005); "Paper settles defamation suit," *Chicago Tribune,* 12Oct2007; <www.chicagotribune.com/news/ct-xpm-2007-10-12-0710111023-story.html>. Although defamation *per se* in Illinois has "presumed damages," the damages must still be proved, *Green v Rogers*, 917 NE2d 450 (IL 2009).
6. Although courts disfavor involvement in political disputes, preferring the voters and legislatures resolve the matter, political lawsuits are frequent. Eg, *Bush v Gore,* 531 US 98 (2000).
7. Freedom of Information Act (FOIA), 5 USC §552, Effective 5 July 1967; and state parallels, eg, Illinois Freedom of Information Act, 5 ILCS 140, Effective 1 Jan 2010. FOIA is sometimes also discouraged in practice, eg, David S Hilzenrath, Project on Government Oversight, "Big Oil Rules: One Reporter's Runaround to Access 'Public' Documents, 6Dec2018, <www.pogo.org/investigation/2018/12/big-oil-rules-one-repor…tm_medium=email&utm_campaign=wr-181208&utm_content=read-more-link>.
8. US House of Representatives, "Investigations & Oversight," <https://history.house.gov/Institution/Origins-Development/Investigations-Oversight/>, 18Feb2019.
9. Hutcheson v US, 369 US 599, n 16 (US 1962) quoting Kilbourn v Thompson, 103 US 168 at 195 and noting Kilbourn "severely discredited, eg, US v Ruimely, 345 US 41, 46.
10. The "term "trade secret" means 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, another person who can obtain economic value from the disclosure or use of the information;" 18 USC § 1839(3).
11. 130 Stat 376, effective 11 May 2016.
12. Uniform Law Commission, <https://www.uniformlaws.org/committees/community-home?CommunityKey=3a2538fb-e030-4e2d-a9e2-90373dc05792>, 18Feb2019.
13. For example, in the Illinoiis Trade Secrets Act, 765 ILCS 1065, "Trade secret" means information, including but not limited to, technical or non-technical data, a formula, pattern, compilation, program, device, method, technique, drawing, process, financial data, or list of actual or potential customers or suppliers, that: (1) is sufficiently secret to derive economic value, actual or potential, from not being generally known to other persons who can obtain economic value from its disclosure or use; and (2) is the subject of efforts that are reasonable under the circumstances to maintain its secrecy or confidentiality.
14. 18 USC §§ 1831-1839 (Chap 90).
15. 18 USC §§ 792-799.
16. USC §§ 1831 & 1832.
17. International Trade Administration, Department of Commerce, The Services Sector: How Best to Measure It?, by John Ward, October 2010. <<https://2016.trade.gov/publications/ita-newsletter/1010/services-sector-how-best-to-measure-it.asp>, 18Feb2019.
18. Signed but not yet ratified. Other trade secret relevant Articles are Civil Protection and Enforcement (20.1.1), Criminal Enforcement (20.1.2), Definitions (20.1.3). Provisional Measures (20.1.4), Confidentiality (20.1.5), Civil Remedits (20.1.6), Licensing and Transfer of Trade Secrets (20.1.7), Prohibition of Unauthorized Disclosure or Use of a Trade Secret by Government Officials Outside the Scope of Their Official Duties. USMCA, Wikipedia, <https://en.wikipedia.org/wiki/United_States–Mexico–Canada_Agreement>, 20Feb2019.
19. US Senate Committee on Commerce, Science & Transportation, "Examining Safeguards

for Consumer Data Privacy," Hearing 26Sep2018, <https://www.commerce.senate.gov/public/index.cfm/hearings?ID=2FF829A8-2172-44B8-BAF8-5E2062418F31>; US Government Accountability Office, Internet Privacy, Jan2019, <https://www.gao.gov/assets/700/696437.pdf>; "Your data was probably stolen in cyberattack in 2018—and you should care, USA Today, 28Dec2018; European Union, General Data Protection Regulation (GDRP) impacts USA entities storing data of EU residents, <https://eugdpr.org>, <https://eugdpr.org/the-regulation/>.
20. Wikipedia, Internet, < https://en.wikipedia.org/wiki/Internet>, 18Feb2019.
21. Id, Source, International Telecommunications Union.
22. 18 USC §§ 1341, 1342, 1346.
23. 18 USC § 1030 (a)(2).
24. 18 USC § 1030(e)(2).
25. Ron Chernow, W*ashington: A Life,* Penguin Books, 2010; Ron Chernow, *Alexander Hamilton*, Penguin Group (USA) LLC, 2005.
26. The report introduces its topics saying the "order of the topics presented in this statement does not necessarily indicate the relative importance or magnitude of the threat in the view of the Intelligence Community." Yet placing Cyber as the first threat is unlikely a random, or even haphazard, act.
27. Id, p 5, original bold, italic.
28. This article's focus on political trade secrets does not imply that commercial trade secrets are not also important, and under risk. Eg, Chinese and Iranian Hackers Renew Their Attacks on U.S. Companies," New York Times, 18Feb2019.
29. <en.wikipedia.org/wiki/Russian_interference_in_the_2016_United_States_elections>, 18Feb2019.
30. <en.wikipedia.org/wiki/2016_Democratic_National_Committee_email_leak>, 18Feb2019.
31. <en.wikipedia.org/wiki/Podesta_emails.>, 18Feb2019.
32. <en.wikipedia.org/wiki/Special_Counsel_investigation_(2017–present)>, 18Feb2019.
33. <en.wikipedia.org/wiki/Russian_interference_in_the_2016_United_States_elections>, 18Feb2019.
34. Emails of top NRCC officials stolen in major 2018 hack, Politico, 4Dec2018, <www.politico.com/story/2018/12/04/exclusive-emails-of-top…etter_Daily-Rundown-250ok_Custom_20181204%20-%20Batch&mi_u=742977>.
35. <en.wikipedia.org/wiki/Criminal_charges_brought_in_the_Special_Counsel_investigation_(2017–present) >, 18Feb2019.
36. WikiLeaks, Wikipedia, < en.wikipedia.org/wiki/WikiLeaks>, 18Feb2019; Cherie Blair & Ema Vidak Gojkovic, WikiLeaks and Beyond: Discerning an International Standard for the Admissibility of Illegally Obtained Evidence, ICSID Review, 3Feb2018, <academic.oup.com/icsidreview/article/33/1/235/4837089>.
37. Jill G Klein & Rohini Ahluwalia, "Negativity in the Evaluation of Political Candidates," Journal of Marketing (Jan 2005).
38. Daniel Kegan, Political Trademarks: Intellectual property in politics and government, Illinois State Bar Association, *44 Intellectual Property Newsletter* 1, October 2004.
39. Gresham's law, Wikipedia, <https://en.wikipedia.org/wiki/Gresham%27s_law>, 20Feb2019.
40. The Caning of Senator Charles Sumner, US Senate, <www.senate.gov/artandhistory/history/minute/The_Caning_of_Senator_Charles_Sumner.htm>, 20Feb2019.
41. 18 USC § 1836(b)(3)(B).
42. 18 USC § 1836(b)(3)(C).
43. 18 USC §¶ 1837.
44. "If two or more persons conspire either to commit any offense against the United States, or to defraud the United States, or any agency thereof in any manner or for any purpose, and one or more of such persons do any act to effect the object of the conspiracy, each shall be fined under this title or imprisoned not more than five years, or both. If, however, the offense, the commission of which is the object of the conspiracy, is a misdemeanor only, the punishment for such conspiracy shall not exceed the maximum punishment provided for such misdemeanor." 18 USC § 371.
45. 18 USC § 371.Most federal crimes have a five year limitations period; capital offenses may be tried at any time, 18 USC 3281.
46. Criminal Resource Manual 651, <www.justice.gov/jm/criminal-resource-manual-652-statute-limitations-conspiracy>, 18Feb2019.
47. "Remedies.—In a civil action brought under this subsection with respect to the misappropriation of a trade secret, a court may—(A) grant an injunction … (B) award—(i) (I)damages for actual loss caused by the misappropriation of thetrade secret; and (II)damages for any unjust enrichment caused by the misappropriation of the trade secret that is not addressed in computing damages for actual loss; or (ii)in lieu of damages measured by any other methods, the damages caused by the misappropriation measured by imposition of liability for a reasonable royalty for the misappropriator's unauthorized disclosure or use of the trade secret; (C)if the trade secret is willfully and maliciously misappropriated, award exemplary damages in an amount not more than 2 times the amount of the damages awarded under subparagraph (B); and (D)if a claim of the misappropriation is made in bad faith, which may be established by circumstantial evidence, a motion to terminate an injunction is made or opposed in bad faith, or the trade secret was willfully and maliciously misappropriated, award reasonable attorney's fees to the prevailing party." 18 USC § 1836 (b)(3)(B)(i).
48. "In establishing the infringer's profits, the copyright owner is required to present proof only of the infringer's gross revenue, and the infringer is reuired to prove his or her deductible expenses and the elements of profit attributable to fators other than the copyrighted work." 17 USC § 504(b).
49. Prudence suggests the plaintiff be prepared with its alternative allocation evidence.
50. Federal Election Commission, <www.fec.gov>; National Conference of State Legislatures, State Campaign Finance Laws: An Overview, <http://www.ncsl.org/research/elections-and-campaigns/campaign-finance-an-overview.aspx>, 19Feb2019; Federal campign finance laws and regulations, <BallotPedia.org>; Illinois State Board of Elections, <https://www.elections.il.gov/campaigndisclosure/faq.aspx>, 19Feb2019:
"Who must file campaign disclosure reports?
Any individual, trust, partnership, committee, association, corporation, or any other organization or group of persons which receives or spends more than $5,000 on behalf of or in opposition to a candidate or question of public policy, meets the definition of a political committee and must comply with all provisions of the Illinois Campaign Financing Act, including the filing of campaign disclosure reports. The $5,000 threshold does not apply to political party committees. In addition, any entity other than a natural person that makes expenditures of any kind in an aggregate amount of more than $3,000 during any 12-month period supporting or opposing a public official or candidate must organize as a political committee. "
51. A civil action under [18 U.S.C. § 1836(b)] may not be commenced later than 3 years after the date on which the misappropriation with respect to which the action would relate is discovered or by the exercise of reasonable diligence should have been discovered. For purposes of this subsection, a continuing misappropriation constitutes a single claim of misappropriation. 18 U.S.C. § 1836(d).

Book Review: 'Bad Blood'

BY GARY T. RAFOOL

The book "Bad Blood (Secrets and Lies in a Silicon Valley Startup)" by

John Carreyrou, a long-time investigative reporter for *The Wall Street*

Journal, is the subject of this review.

It is a 2018 book available in hardcover (299 pages, which includes a 6 page Epilogue), in paperback and electronically.

The book describes the rise and fall of a medical startup company and its founder, Elizabeth Holmes.

According to the author, Elizabeth Holmes was a 19 year old Stanford University student in its Chemical Engineering College during 2004 when she dropped out her sophomore year to start a company named Theranos. This company was perceived as a startup company that could revolutionize the medical industry by making blood testing faster and cheaper.

By 2015, Theranos was valued at $9 Billion, which put Elizabeth's worth at approximately $4.5 Billion. The company had over 800 employees and International recognition. However, by 2017, the value of Theranos was zero, and on March 14, 2018, Elizabeth was charged with fraud by the SEC.

Between her freshman and sophomore years at Stanford, Elizabeth did a summer internship at the Genome Institute in Singapore where, in 2003, she tested specimens of people in Asia suffering from a then-unknown illness named Severe Acute Respiratory Syndrome or SARS. These tests were conducted by using low tech methods such as syringes and nasal swabs.

This experience inspired Elizabeth to search for a better way of testing and diagnosing illnesses. Upon returning from this internship and after many isolated hours, Elizabeth's research and experiments at home allowed her to write a patent application for

an arm patch that would simultaneously diagnose medical conditions and treat them. This ultimately led to the formation of Theranos, which was a combination of the words "therapy" and "diagnosis."

Elizabeth raised money for the company by promoting this idea to family connected friends. Her initial visions grew, according to the author, into a complex system which would allow patients to use a cartridge and reader system at home by pricking a finger to draw a small blood sample and place it in a credit card size cartridge which then slotted to a larger machine called a reader.

The pumps inside the reader would analyze the blood and translate the results, which would then be immediately sent electronically to the patient's doctor's computer by way of a central server.

All of this was supposed to allow the doctor to quickly make any necessary adjustments to the patient's medication. This conceived method would allow patients to save money and time by avoiding the familiar and costlier blood drawing procedures used by doctors' offices where one or more syringes of drawn blood was/were sent to an outside laboratory for an analysis and a report back to the doctor and patient, which usually could take up to several days.

Elizabeth raised almost $6 Million by the end of 2004 from a number of venture capitalists and investors. Therefore, at age 19, Elizabeth dropped out of Stanford to devote all of her time promoting and developing Theranos.

Because of low interest rates after the 2008-09 financial crisis, Eastern Hedge Fund managers, who normally invested in publicly traded stocks, started exploring investment opportunities in Western startup companies such as Theranos, which was based in Palo Alto, California.

In 2010, Elizabeth also approached Walgreens with her simple and cheaper blood testing concept, and she was invited to Deer Field to give a presentation.

According to the author, Walgreens saw Theranos going into its some 8,130 stores as a large revenue stream for it, and that it would be the game changer it was looking for, as well as they did not want CVS to enter into an exclusive deal with Theranos before Walgreens.

In addition, Elizabeth and Theranos were meeting with and marketing this concept to Safeway Super Markets, which not only signed an agreement to put Theranos into its stores, but it loaned Theranos $30 million and promised to renovate its stores to accommodate Theranos devices.

Consequently, Walgreens was promised exclusive use of Theranos in drug stores, and Safeway was promised exclusive use in grocery stores.

With this kind of financial backing, Theranos was able to recruit top talented employees from various tech companies, and its Board of Directors included prominent names such as former United States Secretary of State George Shultz, who gave Elizabeth a 30th birthday party where Henry Kissinger was among the guests in attendance at this celebration.

Elizabeth received numerous accolades, and she was featured many times as the female version of Steve Jobs, whom she had admired for many years, causing her to change her primary wardrobe and appearance to include black turtlenecks and bright red lipstick.

Elizabeth was featured on the cover of the June 2014 issue of Fortune Magazine wearing a black turtleneck, dark mascara around her blue eyes and bright red lipstick next to the headline: "This CEO is out for Blood".

Shortly after that cover feature, Forbes Magazine ran a story about Elizabeth proclaiming her as the youngest woman to become a self-made billionaire.

More complimentary articles followed in USA Today, Fast Company, and Glamour, together with segments on NPR, Fox Business, CNBC, CNN and CBS News. Time Magazine named Elizabeth one of the 100 most influential people in the world.

Theranos was not only attracting skilled employees, investors and favorable media exposure, it was able to retain the prominent attorney David Boies of Boies, Schuller and Flexner to represent it primarily in law suits it filed – or threatened to file – against several employees who were questioning some of its practices and secrecy, as well as its legitimacy.

David Boies rose to national prominence in the 1990s when the U.S. Justice Department hired him to handle its antitrust suit against Microsoft. He also represented Al Gore before the U. S. Supreme Court during the 2000 contested presidential election.

As time went on, the hyped procedures at Theranos started failing to produce the results claimed by Elizabeth, and, more importantly, it was beginning to harm patients with false results. Its employees were afraid to speak up for fear of not only losing their jobs, but they knew they would be involved in prolonged and costly litigation filed against them by Theranos, which, to say the least, had a litigious reputation.

Finally, in early 2015, The Wall Street Journal, through the author of this book, John Carreyrou, started its own investigation of Elizabeth and Theranos.

The difficulties of commencing this type of investigation were compounded by the iron clad confidentiality agreements Theranos required all of its employees to sign, and the continuing threat by Attorney David Boies and his firm against the author and the The Wall Street Journal.

In spite of these hurdles, the author gathered sufficient material, witness statements and evidence to publish on October 15, 2015, a front page "Wall Street Journal" article about Theranos' struggles.

By 2017, Theranos was all but dissolved, and its 800 plus workforce significantly diminished. Finally, on March 14, 2018, Elizabeth, Theranos and others were charged with fraud by the SEC.

Recently, I was told that there may soon be a major motion picture about Elizabeth and Theranos starring Jennifer Lawrence. ■

Originally published, ISBA Senior Lawyers Newsletter, December 2019, reprinted with author's permission.

Copyright Fight: Hollywood Versus a Film School Project

BY RICHARD STOBBE

In the interesting case of *Pourshian v. Walt Disney Company*, 2019 ONSC 5916 (CanLII), plaintiff Mr. Pourshian says that in 1998, while in high school, he conceived the idea of a film in which a character's internal organs (Heart, Stomach, Colon, Bladder, and Brain), were portrayed as personified characters. In 2000, while a film school student in Ontario, he wrote a screenplay and produced a short film called Inside Out based on this idea. He is now a director and cinematographer based in Toronto.

In 2015 Pixar, Disney's animation company, released Inside Out, a feature-length animated film featuring a character whose emotions of Joy, Sadness, Anger, Fear, and Disgust take the form of personified characters. Did Pixar's 2015 production infringe the copyright in the film school project from fifteen years earlier? That's what Mr. Pourshian alleges, claiming that he is the owner of copyright in his original screenplay, live theatrical production, and short film, each of which are titled "Inside Out," and that Pixar infringed those copyrights "by production, reproduction, distribution and communication to the public by telecommunication of the film INSIDE OUT".

This case is more akin to *Cinar Corporation v. Robinson*, 2013 SCC 73 (CanLII), where the infringement claim did not involve direct cut-and-paste copying, but rather was based on an assessment of the cumulative effect of the features copied from the original work, to determine whether those features amount to a substantial part of the skill and judgment of the original author, expressed in the original work as a whole. This involves a review of whether there is substantial copying of elements like particular visual elements of setting and character, content, theme, and pace. Compare this one with Sullivan v. Northwood Media Inc. (Anne with a ©: Copyright infringement and the setting of a Netflix series).

The *Pourshian* case was a preliminary motion about whether the claim can proceed in Canada, or whether it should be heard in the US. The court found that there was a real and substantial connection in relation to the claims and Ontario, and the case will be permitted to continue against Pixar Animation Studios, Walt Disney Pictures Inc. and Disney Shopping Inc.

If this case proceeds to trial, it will be fascinating to watch.

Mr. Pourshian did pursue a separate claim in California (Pourshian v. Disney, Case No. 5:18-cv-3624), which was voluntarily withdrawn in 2018.■

Richard Stobbe, Field Law (Calgary AB Canada), RStobbe@FieldLaw.com

Originally published by JdSupra, 17Dec2019, Reprinted with author's permission.

Intellectual Improbabilities™

BY DANIEL KEGAN

COPYRIGHTS

Yearbook Photo Not Fair Use. In the 1990s plaintiff John Dlugolecki photographed high school student Meghan Markle; these photographs were published in her school yearbooks. Defendant ABC used several of the photos, for 49 seconds during eight hours of combined broadcast time covering news of Markle's engagement. In a preliminary finding ABC failed to establish its fair use defense. *Dlugolecki v Poppel*, (CD CA, 18-3905-GW 22Aug2019).

1+1+1 . . . = Lots. A Virginia jury awarded music publishing companies nearly $100,000 compensatory damages for each of the 10,017 music works infringed by subscribers of Cox Communications, an Internet access provider, which failed to block Internet access as repeat copyright infringers. Sony Music Entertainment v Cox Communications, (ED VA, 1:18-cv-950, Liability summary judgment 27Nov2019; Jury verdict 31Dec2019, AIPLA Newsstand).

Got Your Goat? Photographer plaintiff Miller sued 4Internet for displaying two of his goat photographs. Defendant countersued for the photographer and his attorney engaging a non-party bot to search for potentially infringing uses of the goat photo and other photos. The court ruled defendant had not shown its harm was plausibly caused by photographer's alleged conduct. Miller v 4Internet, LLC (D NV, 2:18-cv-02097-JAD, 8Jan2020).

Billy Goat Curse Successor? A Chicago Cubs employee retweeted words from an author's book. The ND IL will decide whether a retweet creates a copy (copyright liability) or not. Bell v Chicago Cubs BasebaLl Club, LLC, 2020 USPQ2D 38131 (ND IL, 19-2386, 4Feb2020).

Loosened Hardware. Plaintiff VVV sesame oil company sued to cancel defendant Meenakshi's IDHAYAM trademark registration, after VVV abandoned its TTAB opposition by failing to respond to the Board's order to show cause. The Boarded entered judgment against VVV

and dismissed its opposition with prejudice. VVV applied to register IDHAYAM, was blocked by Meenakshi's registration, and then moved to cancel Meenakshi's registrations and also filed a 2014 infringement suit in ED CA. Although B&B Hardware v Hargis Industries, (135 SCt 1293, 21Dec2015), suggested a TTAB decision may support claim preclusion, the 9th Circuit recognized that TTAB proceedings are limited to registration issues and could not have settled the district court's particular claims.

Time and Tide Wait for No Person. Copyright for the silent film Peter Pan expired 1Jan2020. In 2024 the original Mickey Mouse enters public domain copyright, but perhaps not trademark. Disney began using a clip of Mickey Mouse from the 1928 animation Steamboat Willie in [re-movie introductions of its other films, joining MGM's Lion's Roar as a trademark.

Inflation, Fees Change. New Copyright Office fees become effective 20Mar2020. Federal Register final rule, 19Feb2020, <https://www.govinfo.gov/content/pkg/FR-2020-02-19/pdf/2020-03268.pdf>. Fee Chart (starting page 20), <https://www.copyright.gov/rulemaking/feestudy2018/proposed-fee-schedule.pdf>.

Document Recordation Pilot. The Copyright Office published its Interim Rule on recording transfers of copyright ownership and other documents, 17 USC § 205. January 3, 2020 the Supplemental Rule was published, part of the Office's Modernization Project. <https://www.copyright.gov/rulemaking/recordation-modernization/>

EFF v CASE. The Electronic Frontier Foundation sees dangerous flaws in the Copyright Alternative in Small-Claims Enforcement Act (CASE Act), HR 116-252, <www.eff.org/deeplinks/2019/09/congress-continues-ignore-dangerous-flaws-case-act>; <https://www.congress.gov/bill/116th-congress/house-bill/2426/text>.

Fandom Archive. The Organization for transformative Works, <www.TransformativeWorks.org>, is a nonprofit run by and for fans to provide access to and preserve the history of fanworks and fan cultures. It provides the Archive Of Our Own (AO3), <ArchiveOfOurOwn.org>, central archive for transformative fanworks as fanfiction, fanart, fanvideos, and podfic.

Fake News, Fake Court Orders. Fake court orders to get web content removed are increasing, to silence a blogger or remove negative content from search results so it will be unfindable. Rebecca Tushnet, "Content Moderation in an Age of Extremes, 10 J L Tech & Internet 1 (2019) [on bad content—harassment, revenge porn, fake news, copyright infringement], citing Revised Amicus Curiae Brief of Eugene Volokh in Support of Appellant, Hassell v. Bird, 274 Cal. App. 4th 1336 (2016), <digitalcommons.law.scu.edu >.

TRADEMARKS

Good Hands, Fewer Brands. Allstate Insurance is cutting its Esurance line to focus on building it name brand. (Chicago Tribune, 19Dec2019).

Unrelated Goods and Services. Once upon a time. Arcade game company Atari is opening eight video-themed hotels across the US, including one in Chicago. (WBEZ, 31Jan2020).

New Branding Language. Amazon is big, and influential. Amazon's Marketplace enables e-third-party sellers an e-commerce platform alongside Amazon's regular offerings. A third-party seller with a registered trademark may join the Amazon Brand Registry and acquires additional Amazon reporting and capabilities. "Amazon's utterly pervasive and unique new branding language, which is neither specifically foreign, nor descriptive of th products in any obvious way, as with forgettable, semi-generic brands stocked in brick-and-mortar store or by other online retailers." New brands such as Pvendor, Rivmount, Fretree, Majcf. </www.nytimes.com/2020/02/11/style/amazon-trademark-copyright.html>.

Quick Response. Beginning 24Dec2019 the USPTO is including a Quick Response code (2D bar code) on printed trademark registration certificates. Scanning the code in a QR-enabled app should open a digital image of the registration certificate in the PTO's Trademark Status and Document Retrieval (TSDR) system. PTO says this is "a step toward providing an official digital registration certificate that will replace the print version" (PTO 20Dec2019). Might Quick Responses extend to Petitions?

Logo Trends. Logaster summarized its ten logo design trends for 2020: Original geometry, Unusual fonts, Gradients, Cluttered design, Chaotic arrangement, Geometric letters, Emblems, Scaling, Text destruction. Infographic <https://www.socialmediatoday.com/news/10-logo-design-trends-that-will-take-charge-in-2020-infographic/569714/>.

Cheap and Hard. "It's never been cheaper to start a business, although I think it's never been harder to scale a business," says Neil Blumenthal, a founder of eyewear brand Warby Parker. Brand loyalty has reportedly decreased while direct-to-consumer brands grow. (Lawrence Ingrassia, "They Changed the Way You Buy Your Basics," NYTimes, 23Jan2020), <https://www.nytimes.com/2020/01/23/business/Billion-Dollar-Brands.html>.

99 and 44/100%. To error is human, and human errors infect databases. TESS and TSDR guru, Ken Boone, retired from the PTO, occasionally graces the trademark bar with empirical reports of trademark database inconsistencies. Measure twice, cut once applies widely to human affairs.

The Face That Launches a Thousand Slips. Facebook agreed to payu $550 million to settle its facial recognition (Illinois Biometric privacy law). (NYTimes 29Jan2020). Followed by Molander v Google Llc (ND CA, 5:20-cv-00918, filed 6Feb2020), <https://doc-04-38-apps-viewer.googleusercontent.com/viewer/secure/pdf/13m8jdvp97umefng9thtvq3tj2ruhv3iqa98tmevbpr7ht7n4kd60rm8efu/1581798375000/drive/01984788463755563328/ACFrOgACJ639vL2t9qhdSSQ2K_raMJ7Lp_CDseul-UYzLadwIXsFIEjj8RIfHiyJr-BRGwOGnSCbtBEPfomRpNLsLM9FFLCaT74tV6Lv4XPLKahYPuRRR5rP6rv1JuJZjL9lf53985HFVcVvgZw1?print=true&nonce=sqedbcsrked66&user=01984788463755563328&hash=e2ajef5p2uhmc4s94cpdk1n5tm0geqrq>. Cf <www.pogo.org/analysis/2020/02/no-clearview-ais-creepy-plan-to-spy-on-us-is-not-free-speech/?utm_source=weekly-reader&utm_medium=email&utm_campaign=wr-200215&utm_content=header>

Chips Off the Block-Chain. Accelerating three-years payment of his $13.5 million guaranteed $34 million contract with the Brooklyn Nets, guard Spencer Dinwiddle will be offering to sell 90 SD8 coins (a blockchain-based investment platform), backed by his contract. <https://www.coindesk.com/nba-players-contract-tokenization-plan-can-move-forward-reports>.

TinEye. TinEye is a reverse image search engine, offered by Idée, Inc (Toronto). It uses image identification rather than keywords, metadata, or watermarks, <TinEye.com>.

Have Email, Will Disclose? The PTO released 7Feb2020 its Examination Guide 1-20, with new electronic filing and specimen requirements effective 15Feb2020, unless the PTO attends to strong protest from the trademark bar and again extends, and perhaps "corrects" proposed rules. As currently asserted in Guide 1-20 filing attorneys, applicants/registrants, and parties need to file with the PTO their own, separate email addresses, which must be personally monitored by the trademark owner. Unacceptable email address include those of outside counsel, a foreign law firm. The email address of applicant, registrant, or party will be viewable in TSDR. A petition may be filed, with current fee, to redact the email address in "an extraordinary situation," TMEP § 1708.

Scammers Faster than Petitions. Many concerns have been raised. Petitions have a history of slow processing; scammers of databases usually skim data quickly. Persons benefiting from a protective order, celebrities wishing some boundaries, and persons who do not use email appear overlooked.

Reportedly third-party emails (gmail, aol, hotmail, iCloud, xfinity) might not be acceptable, requiring those email holders to buy a new domain and email hosting services. These estimated costs, determinable from estimates of the past year's filings, seem not to have been calculated nor reported.

In a gross attempt to prevent improper foreign documents from being filed, the new electronic forms will require a "street" address of the "domicile" of the filer—Post Office Boxes and Commercial Mail Receiving Agency (CMRA) are not domiciles, since people do not sleep in such boxes. <https://blog.oppedahl.com/?p=5382, 7Feb2020>. Some rural and tribal areas lack street addresses; some business have found local mail less reliable and have all their mail addressed to a postal box; and some corporate executives, and perhaps others, fear being kidnapped.

A revised Exam Guide, issued 14Feb2020 still requires an applicant's email, but now it may be that of applicant's attorney, the applicant itself need no longer regularly access and review the email." Other problems remain; confusion on email and domicile continues.

Some have questioned whether the new rules and electronic forms comply with the Administrative Procedure Act, Paperwork Reduction Act, and the Small Business Administration rules under the Regulatory Flexibility Act; wondered how the PTO intends to comply with GDRP (DU); and when the PTO submitted the proposed new regulations for clearance under Executive Orders 12866 and 13272. <https://sfconservancy.org/docs/2019-09-18_Conservancy-USPTO-Petition-re-rule-2_189.pdf>.

PATENTS

Patent Fee Changes. Some US patent fees have changed, 1Jan2020.

PTAB Toolkit. The PTAB has issued a New to PTAB Toolkit, <www.uspto.gov/patents-application-process/patent-trial-and-appeal-board/ptab-inventors>. Some assembly required.

SAOSIT. Paris Convention Article 4 requires that the second application needs to have its applicant be the same applicant or successor in title (SAOSIT) as the applicant in the first application. Reportedly, some patent offices, including UK and EPO require the documents be executed chronologically before the filing of the second application. (Carl Oppedahl's Ant-like Persistence blog, 17Dec2018).

For Better and Worse. Many inventors are employees who assign their inventor rights to their employer. However, property acquired by a married individual (in most, if not all states) is considered marital or community property. An employer who receives an assignment from the employee alone of only the employee's interest may own the patent jointly with the spouse who has his or her own undivided interest in the marital property. Thus a potential conflict between federal patent and state family law. <https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3476899>.

Top Five PCT/RO. Used to be the United States received the most Patent Cooperation Treaty (PCT) applications. But for 2019 the top six, in order down, were CN (52,286), US (50,611), JP (46,930), EP (33,894), KR (16,862), and IB (11,606). Filing at the International Bureau may be handy if one's local Receiving Office were out of service. <https://blog.oppedahl.com/?p=5457#more-5457>.

Patents for Humanity. Patents for Humanity is the United States Patent and Trademark Office's (USPTO) awards competition recognizing innovators who use game-changing technology to meet global humanitarian challenges. The program provides business incentives for reaching those in need: winners receive an acceleration certificate to expedite select proceedings at the USPTO, as well as public recognition of their work. The awards showcase how patent holders with vision are pioneering innovative ways to provide affordable, scalable, and sustainable solutions for the less fortunate. Started 2012 under the Obama Administration, this year's applications closed 15Feb2020, extended from 7Jan. The annual program may continue.

CCIPS. The Computer Crime and Intellectual Property Section (CCIPS) of the Department of Justice is responsible for implementing the Department's national strategies in combating computer and intellectual property crimes worldwide. CCIPS prevents, investigates, and prosecutes computer crimes by working with other government agencies, the private sector, academic institutions, and foreign counterparts. <https://www.justice.gov/criminal-ccips>.

CYBER

Leak Seized. The FBI seized WeLeakInfo.com for selling information from data breaches. The commercial disclosure of stolen information gets some enforcement attention. These accessed credentials were reportedly used to conduct attacks in the US, UK, and Germany. <www.bleepingcomputer.com/news/security/

weleakinfocom-seized-for-selling-info-from-data-breaches-2-arrested/>.

Big Easy Shut Down. New Orleans city computers suffered a cyber attack. Reports suggest recovery extends weeks, costs millions. <https://www.govtech.com/security/New-Orleans-Continues-Work-to-Recover-From-Cyberattack.html>.

Paid to Fix His Covert Logic Bombs. David Tinley, 20Dec2019, pled guilt to intentional damage to a protected computer. He was a contract employee for Siemens Corporation in Monroeville PA and surreptitiously planted logic bombs into his projects, causing them to malfunction after a preset time. Because managers were unaware of the logic bombs and didn't know the malunction cause they called Tinley to fix the projects. (WD PA 19July2019).

Follow the NIST Guidance. June 2017 the National Institute of Standards and Technology (NIST) updated its Digital Identity Guidance. Recognizing reality, and quite contrary to conventional belief and practice favoring, often enforcing, that digital passwords need to be long and complex, NIST recommended passwords should be "easy to remember" but "hard to guess." Security favors usability. Guidelines included: minimum of eight characters; ability but no requirement to use special characters; restrict sequential and repetitive characters (1234 or aaaa); restrict contrxt specific passwords (eg name of the site); restrict commonly used passwords (p@ssw0rd) and dictionary words; restrict passwords obtained from previous breaches, <https://pages.nist.gov/800-63-3/sp800-63b.html>. The PTO, as so many sites followed the old tradition, requiring practitioners to change their passwords within 60 days. Recently, without much fanfare, the PTO changed its requirement: "You can change your password at any time. Your password does not expire."

Incidents. The Sedona Conference has issued its Incident Response Guide, Final Version, January 2020, for data security and privacy liability.

Best Victim Practices. The Cybersecurity Unit of the Department of Justice issued September 2018 its Best Practices for Victim Response and Reporting of Cyber Incidents, Version 2l.0, <https://www.justice.gov/criminal-ccips/cybersecurity-unit>.

Mirror Mirror On the Wall, Who's the Fakest Of All. Dating apps need women, Advertisers need diversity, artificial intelligence companies offer fake people. <www.washingtonpost.com/technology/2020/01/07/dating-apps-nee…advertisers-need-diversity-ai-companies-offer-solution-fake-people/>.

NEW ILLINOIS LAWS & OTHER BILLS

Revenge Porn. Victims of revenge porn now have civil remedies to recover economic, emotion and punitive damages from tormentors who disseminate nonconsensual private sexual images. SB 1507. <http://illinoissenatedemocrats.com/images/PDFS/2019/2020-new-bills-list.pdf>

Compromising Image Removal. A private right of action may be taken against individuals for intentionally posting a compromising image of another online or the owners or operators of a website hosting the images. HB2408 Public Act 101-0385. <http://www.ilga.gov/legislation/publicacts/fulltext.asp?Name=101-0385>

Smile for the Employment Video. Employers must obtain consent from potential employees being interviewed for openings if the interview uses artificial intelligence analysis. Not yet clear how, where "artificial intelligence" is defined. HB2557, Public Act 101-0260.

<http://www.ilga.gov/legislation/publicacts/fulltext.asp?Name=101-0260>

This Little Piggy. Animal-tested cosmetic products are now banned in Illinois, joining California and Nevada. SB241, Public Act 101-0303. <http://www.ilga.gov/legislation/BillStatus.asp?DocNum=241&GAID=15&DocTypeID=SB&LegId=116139&SessionID=108&GA=101>

Gustibus non disputandum **est**. The FDA's Nutrition Innovation Strategy aims to modernize its Standards of Identity for labeling plant-based diary product and plant-based meat labeling, including the proposed federal REAL Meat Act (HR4881), <https://www.congress.gov/bill/116th-congress/house-bill/4881/text>, and similar state laws and bills. <FDLI@FDLI.org>. Do you eat the same way as a decade or two ago?

Food Nonbinding Recommendations. The FDA issued December 2019 "Food Labeling: Serving Sizes of Foods That Can Reasonably Be Consumed At One Eating Occasion, Reference Amopunts Customarily Consumed, Serving Size-Relatefd Issues, Dual-Column Labeling, and Miscellaneous Top[ics: Guidance for Industry."

New Nutrition Facts. FDA's new Nutrition Facts label regulations became effective 1Jan2020 for companies with over $10 million in annual sales. Included are a new single-serve container and clarification for packages requiring a two-column nutrition fact table, one for single serving and the othe for the entire product contents.

Jurisdiction. The Seventh Circuit, sua sponte, reminded many attorneys that the appellate jurisdictional statement needs to be both "complete and correct." *Lowrey v Tilden* (7th Cir, 3Feb2020, Judge Wood, 19-1365 & 19-3145).

INTERNATIONAL

INTA. Concerned about the spreading Wuhan China Coronavirus, the International Trademark Association cancelled its planned 24May2020 annual meeting in Singapore, and is trying to reschedule for a USA location, May or June 2020. With past attendance approaching, relatively few cities, even worldwide, can comfortably accommodate ten thousand conferencees on two months' notice. The Annual Meeting is a significant component of INTA's annual budget; it will try to reschedule.

OurWorldInData.org, Research and data to make progress against the world's largest problems; 3315 charts across 297 topics, open access and open source. For an appetizer, only ten charts, including Brand Value, <<https://ronaldyatesbooks.com/wp-content/uploads/2019/12/The-World-In-Charts-8.20.19.pdf>.

Bulgaria. A new law on trademarks and geographical indications entered into force in Bulgaria 17Dec2019.

Canada. With the new trade marks law, applicants are now evaluated not only for descriptiveness, bu now also for distinctiveness. (Norton Rose, 21Feb2020).

EU Imprecision Ok; Weak Intent Perhaps. Imprecise terms in an application/registration's goods and services does not invalidate the EU Trademark. An application without any intention to use the mark for the goods and services specified could constitute

bad faith if there is "objective, relevant and clear indicia"that applicant's intention was a) to undermine the interests of third parties contrary to honest practices, or b) obtaining an exclusive right for purposes other than those serving the function of a trademark. Sky v Skykik (CJEU, C-371-18).

<http://curia.europa.eu/juris/document/document.jsf;jsessionid=5DE…pageIndex=0&doclang=EN&mode=req&dir=&occ=first&part=1&cid=3375617>

India. In India, patentees must file, by 31March, a "Working Report" giving the extend of commercial exploitation in India of all granted live patents.

Iraq, Lebanon, Syria. Practitioners for IP in the Middle East and North Africa (MENA) report no recent changes and thus continued requirements for boycott declarations or questionnaires. (INTA Bulletin, 15Dec2019).

New Zealand. The Regulatory Systems (Ecomonic Development Amendment Act 2019 became effective 13Jan2020, amending New Zealand's Trade Marks Act 2002.

Palestine. The Palestinian National Internet Naming Authority, <www.PNINA.ps>, opened registration of single-letter domain names within the Top-Level Domain (PS) and the Top-Level-Domain in Palestine, 6Jan2020. < https://www.pnina.ps/premium-names/>.

Singapore. The Harvard Club of Singapore, formerly an official alumni club of Harvard University (USA), opposed trademark registration of HARVARD CLUB OF SINGAPORE and HARVARD UNIVERSITY CLUB OF SINGAPORE, after the USA university revoked the local club's status due to issues with the club leadership. Opposition dismissed. (INTA Bulletin, 15Feb2020).

Ukraine. Ukraine changes to Customs enforcement of IP rights entered into force 14Nov2019. (INTA).

United Kingdom. Brexit happened 11.00 pm GMT 31Jan2020; with a transitional year to 31Dec2020. Then . . . .

Viet Nam. The Hague Agreement for Industrial Designs became effective in View Nam (VN) 30Dec2019, joining prior effective agreements there for Patent cooperation Treaty and Madrid Protocol.

WIPO Head? The USA is lobbying other nations to not have China head the UN's World Intellectual Property Organization; Election expected early March 2020. <https://www.bloomberglaw.com/exp/eyJjdHh0IjoiSVBOVyIsImlkIjoiMDAwMDAxNzAtNTBmZC1kYzEyLWFmNzgtNTVmZmE5Y2QwMDAwIiwic2lnIjoiL0xNSG1JMHRyQW90K1YrWEZRbXhiRXk2ZlJrPSIsInRpbWUiOiIxNTgyMDI3NTg1IiwidXVpZCI6Ijhpb3k0NENKZUdmNUxRYjNKNjM1SUE9PTBzb1FEeG9La2JVSUNKdUhzdXRVemc9PSIsInYiOiIxIn0=?usertype=External&bwid=00000170-50fd-dc12-af78-55ffa9cd0000&qid=6862541&cti=LFSM&uc=1320021724&et=CURATED_HIGHLIGHTS&emc=bipnw_hlt%3A9&context=email&email=00000170-4514-de74-adf4-edddd0c60000>■

<daniel@kganlaw.com>,