
AN ANALYSIS OF THE FIRST AMENDMENT THROUGH THE LENS OF
SOCIAL MOVEMENTS: HOW APPLE’S LATEST IPHONE PATENT CAN
CHANGE THE WAY WE RISE

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I. Introduction

Every day, all across the world, billions of people use their iPhone as a vital source for communicating, gathering information, listening to music, and capturing photos and videos.¹ With the swipe of a finger or the touch of a button, billions of people worldwide have the technology in the palm of their hands to capture any moment that they want – whether it be a treasured memory, an Instagram photo of a user’s latest meal, or even a video of a newsworthy story.² In fact, Americans use their iPhones so often that they may have a tendency

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¹ See Nick Statt, *1 Billion Apple Devices Are in Active Use Around the World*, THE VERGE (Jan. 26, 2016), archived at <https://perma.cc/6D54-QRXA> (portraying Apple’s latest milestone of having 1 billion active devices throughout the world); see also *iPhone X*, APPLE (Nov. 3, 2017), archived at <https://perma.cc/H8V4-96DM> (describing the features and uses of an iPhone X).

² See Katie Marsal, *Apple Touts iPhone 6 as World’s Most Popular Camera in Showcase of Extraordinary User Photos*, APPLE INSIDER (Mar. 1, 2016), archived at <https://perma.cc/MW6Z-QSF2> (showcasing most popular apps and uses for the iPhone 6 camera); see also Jeff Storey, *Q&A: Mickey Osterreicher*, NEW YORK L. J., Aug. 17, 2012 (suggesting the influence camera phones have had on the ease of posting news stories).

to overlook the implications of having such significant power at their fingertips.³ Recently, Apple obtained a patent, which could pose a threat to the ability of users to freely use their iPhone cameras.⁴

The United States Patent and Trademark Office recently granted Apple a patent that has the potential to change the way millions of iPhone users use their cell phone, specifically the camera.⁵ The patent is titled “Systems and methods for receiving infrared data with a camera designed to detect images based on visible light” (“Infrared Data Patent”).⁶ The system is designed to remotely disable the iPhone camera in places, such as concert venues, museums, and theaters.⁷ The language of the patent uses live concerts as the prime example of where this patent will achieve optimal use.⁸ With this patented technology, performing musicians and artists will have their copyright protected from viewers who record and pirate live concerts.⁹

While this patent may seem appropriate to protect artists, it presents several serious implications that could change the way Americans use their iPhones.¹⁰ What if this technology were to be

³ See Fred I. Williams & Rehan M. Safiullah, *The Smartphone Patent Wars: A U.S. Perspective*, METRO. CORP. COUNS., Nov. 2012, at 12 (making the notion that people now have a sense to need everything at their fingertips).

⁴ See *Apple Wins Patent On Technology To Stop Fans Filming Gigs*, THE GUARDIAN (Jun. 30, 2016), archived at <https://perma.cc/MQW4-L5D6> [hereinafter *Guardian Music*] (discussing some of the potential reasons for incorporating infrared technology to stop filming at concerts per the benefit of the artist).

⁵ See U.S. Patent No. 9,380,225 (issued Jun. 28, 2016) (exemplifying the official patent that Apple may now use to disable iPhone cameras using infrared technology).

⁶ *Id.*

⁷ See *id.* (portraying the technology’s capabilities to include data encoded based on amplitude modulation, frequency modulation, phase modulation or a combination thereof, which can correspond to any suitable information or commands, such as a command to disable recording functions).

⁸ See *id.* at 40 (using concert venues as an example of how the patent will be best put to use). See also *Guardian Music*, *supra* note 4 (considering the implications of being unable to take photos or film at concerts, and even uploading online).

⁹ See Ben Lovejoy, *Apple Granted Patent for Way to Stop iPhones from Taking Photos at Concerts or Sensitive Locations*, 9TO5MAC (Jun. 28, 2016), archived at <https://perma.cc/9K6M-4XRL> (arguing that this patent could prevent concert attendees from being distracted by capturing the show on their phone).

¹⁰ See *id.* (discussing the notion that people are distracted by their iPhones at concerts); *Guardian Music*, *supra* note 4 (reasoning that there are implications to being unable to take photos and videos at concerts); Williams et al., *supra* note 3, at 12 (noting the need that Americans feel to constantly have their smartphones in use).

used by the police or the government, who could benefit from disabling iPhone cameras at their discretion?¹¹ Alternatively, what if the police or the government – who are constantly facing backlash from video recordings and photographs – could enable this feature at locations of their choosing?¹² What if, by pointing infrared signals to a specific location, millions of Americans could find themselves unable to use their camera?¹³ Arguably, this may pose a threat to basic fundamental rights as Americans under the First Amendment – the freedom to express ourselves through means of photographs, speech, protest, and religion, among several other things.¹⁴

This Note will explore the potential First Amendment violations that could arise out of Apple's latest iPhone camera patent if the technology were to be adopted by the police and the government.¹⁵ By exploring the history of the First Amendment and its evolution as it applies to photographs and video recordings in public places, this Note demonstrates both the media and the public's reliance on smartphone cameras, particularly that of the iPhone.¹⁶ This Note will argue that the disabling of iPhone cameras in public places by the police or the government should be forbidden, because doing so would be a violation of the First Amendment of the United States Constitution.¹⁷

¹¹ See *infra* Analysis: Section B (analyzing the reasons as to why the police or government might want to implement the Infrared Data Patent to their daily uses).

¹² See *infra* Analysis: Section B (discussing the implications of the police and government having the ability to implement the Infrared Data Patent in certain situations).

¹³ See *infra* Analysis: Section B (explaining how the Infrared Data Patent works by using infrared signals).

¹⁴ See U.S. CONST. amend. I (providing language of the First Amendment to the United States Constitution that gives citizens the rights to freedom of speech, religion, protest, and press).

¹⁵ See *infra* Analysis: Section B (exploring the potential implications of First Amendment violations that could arise as a result of Apple's iPhone infrared patent technology).

¹⁶ See *infra* History: Section A (interpreting the First Amendment as applies to developing smartphone technology); see also *infra* Facts (portraying the reasons as to why people are now so reliant on their smartphones).

¹⁷ See *infra* Analysis (determining that there would be a First Amendment violation if the police were to use the Infrared Data Patent as a way of disabling people from recording them, or using their iPhone cameras during protests).

II. History

A. History of the First Amendment

The First Amendment of the United States Constitution is one of the most recognized forms of legislation in America.¹⁸ Since its enactment in 1791, the First Amendment of the Constitution has served to protect American citizens from the government by enacting “... no law respecting an establishment of religion, or prohibiting the free exercise thereof; or abridging the freedom of speech, or of the press; or the right of the people peaceably to assemble, and to petition the Government for a redress of grievances.”¹⁹ Meanwhile, as a way of protecting the rights granted under the First Amendment, the Fourteenth Amendment of the United States Constitution states that:

“... [n]o 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.”²⁰

With this, the “fundamental personal rights” of American citizens, such as the right of natural born citizenship, life, liberty, property, and “equal protection of the laws,” are protected, including those

¹⁸ See Peter Moore, *The First Amendment is the Most Widely Known Amendment in the Bill Of Rights, and the Most Appreciated*, YOUGov (Apr. 12, 2016), archived at <https://perma.cc/5CDW-ZCDG> (pontificating on the relevance and renown of the First Amendment, and noting that 41% of Americans say that it is the most important Amendment of the Bill of Rights); see also Thor Benson, *Beyond the First Amendment: You're Probably Confused About Free Speech*, SALON (Aug. 31, 2016), archived at <https://perma.cc/XU6H-LMPJ> (articulating the notion that with the rise of technology, the First Amendment gets stretched). Experts claim that this is done so by the freedom to post on Internet sources, such as Twitter and Facebook, yet people do not understand that the freedom of speech is larger than the First Amendment. *Id.*

¹⁹ See U.S. CONST. amend. I (presenting the actual language of the First Amendment to the United States Constitution, which grants U.S. citizens the right to freedom of speech).

²⁰ See U.S. CONST. amend. XIV § 1 (laying the “Due Process Clause” of the Fourteenth Amendment of the United States Constitution).

rights covered under the First Amendment.²¹ Since the beginning of First Amendment jurisprudence, courts have held that any regulation that restrains speech due to its content constitutes a violation of the First Amendment.²²

Throughout the First Amendment's history, courts have hesitated to uphold statutes that provide a question of "improper infringement of the exercise of First Amendment rights."²³ For example, an "improper infringement" occurs when people are prevented from undertaking certain acts, such as peaceful canvassing, soliciting at homes, and even distributing pamphlets, so long as they are appropriate.²⁴ In fact, the only time a court has ruled that a statute is permitted to violate these rights is when that statute contains a compelling state interest – affecting a person's personal fundamental rights.²⁵ For example, a "compelling state interest" exists in matters of maintaining student body diversity in universities and regulations for abortions.²⁶

²¹ *See id.* (explaining the "fundamental personal rights" that are protected under the Fourteenth Amendment); *see also* *Gitlow v. New York*, 268 U.S. 652, 666 (declaring that the Fourteenth Amendment makes the First Amendment applicable to the states).

²² *See* *Blackston v. Alabama*, 30 F.3d 117, 120 (11th Cir. 1994) (explaining that "content-neutral" restrictions are permissible "only if it is supported by a substantial government interest and does not unreasonably limit alternative avenues of communications").

²³ *See* *Citizens for Better Env't v. Schaumburg*, 590 F.2d 220, 223-24 (7th Cir. 1978) (ruling that although statutes may be enacted constitutionally, they still have the potential to raise questions of First Amendment infringement).

²⁴ *See id.* (providing examples of "improper infringements" of the First Amendment).

²⁵ *See* *Fed. Election Com. v. Mass. Citizens for Life, Inc.*, 479 U.S. 238, 256 (1986) (affirming that a burden on citizen's First Amendment rights must stem from a "compelling state interest"); *see also* *Weber v. Aetna Casualty & Surety Co.*, 406 U.S. 164, 173 (1972) (opining on the dual analysis of a the strict-scrutiny inquiry). "What legitimate state interest does the classification promote? What fundamental personal rights might the classification endanger?" *Id.*; *see also* *Williams v. Rhodes*, 393 U.S. 23, 32 (1986) (citing *NAACP v. Button*, 371, U.S. 415, 438 (1963). In deciding whether the State has power to place unequal burdens on minority groups where rights are at stake, the decisions of the Court have held that "only a compelling state interest in the regulation of a subject within the State's constitutional power to regulate can justify limiting First Amendment freedoms." *Id.*

²⁶ *See* *Grutter v. Bollinger*, 539 U.S. 306, 321 (2003) (identifying student body diversity in universities as a compelling state interest); *Planned Parenthood v. Casey*,

In order to recover on a First Amendment claim, a plaintiff must show how and why his or her conduct should be protected under the First Amendment.²⁷ Showing that the conduct constitutes a level of harassment, motivated by the exercise of his or her free speech also proves a First Amendment claim exists.²⁸ However, courts also note that a “mere attempt,” such as a threat or a conspiracy, to deprive an individual of their First Amendment rights does not always grant that person the right to recover.²⁹ In order to determine whether a “mere attempt” to violate the First Amendment was made, courts look to the “nature of the forum in which the speaker’s speech is restricted.”³⁰ Forums can be either public or nonpublic, and the test for determining whether a First Amendment violation occurs is determinative on its location.³¹ For instance, public places, or “forums,” are those that are historically associated with allowing people to freely exercise various activities, such as “streets, sidewalks, and parks.”³² Thus, if a forum is not considered public, courts have held that it is constitutional to restrict expressive speech and conduct, so long as

505 U.S. 833, 876 (1992) (stating that certain regulations for abortion rights are a “compelling state interest”).

²⁷ See 42 U.S.C.S. § 1983 (explaining the grounds on which avenues for redress may be litigated); see also *Leibovitz v. Barry*, 2016 U.S. Dist. LEXIS 128231, at *20 (N.Y.E.D. Ct. 2016) (describing how one proves a claim violated under the First Amendment when they demonstrate that conduct is deserving of First Amendment protection, and that the defendants’ contact of harassment was motivated by or substantially caused by his exercise of free speech).

²⁸ See 42 U.S.C.S. § 1983 (setting forth the statutory hurdles for a plaintiff to recover in proving a First Amendment infringement has been made towards them by a defendant).

²⁹ See *Andree v. Ashland County*, 818 F.2d 1306, 1311 (7th Cir. 1987) (exhibiting threshold level of attempts that must be made in order to qualify for a First Amendment recovery under § 1983); see also *Berard v. Town of Millville*, 113 F.Supp. 2d 197, 203 (Mass. Dist. Ct. 2000) (upholding the standard for First Amendment recovery).

³⁰ See *Huminski v. Corsones*, 396 F.3d 53, 89 (2d Cir. 2004) (describing the method of determining whether a First Amendment infringement lies under a “Forum Analysis”); see also *Leibovitz*, 201 U.S. Dist. LEXIS 128231 at *19-20 (analyzing how courts determine First Amendment violations in the setting of a forum).

³¹ See *Huminski*, 396 F.3d at 89 (explaining the test in determining a public and private space based on its intended use).

³² See *id.* (portraying spaces that are considered public forums based on their intended use) (quoting *United States v. Grace*, 461 U.S. 171, 177 (1983)).

those restrictions are reasonable and are not made in any way due to an opposition of a public official's viewpoint.³³

As the technology surrounding cameras evolved, courts began to interpret First Amendment rights not only to expression through speech in the form of words, pamphlets, and writings, but also to photographs and video recording.³⁴ Most notably, courts have reviewed issues involving the allowance of personal cameras, and even media cameras within courtrooms, concluding that preventing these devices in a courtroom is not a violation of the freedom of speech under the First Amendment.³⁵ While cameras are occasionally allowed for the media, there are no circumstances in which the public is allowed to bring cameras into the courtroom to observe court proceedings.³⁶

³³ See *id.* at 99 (laying out instances where a restriction on one's freedom of speech and expression is authorized).

³⁴ See Marc Jonathan Blitz, *The Fourth Amendment Future of Public Surveillance: Remote Recording and Other Searches in Public Space*, 63 AM. U.L. REV. 21, 75 (2013) (describing innovations and miniaturization in camera technology in regards to cell phones and how that technology has developed First Amendment laws, specifically citing citizen recordings of police).

³⁵ See *People v. Dixon*, 148 Cal. App. 4th 414, 431 (Cal. Ct. App. 2007) (explaining that while the public and the press have a First Amendment right to attend court proceedings, that does not grant them a constitutional right to bring a camera into the courtroom).

³⁶ See CAL. R. CT. 1.150 (2017) (providing court definitions of "media coverage," "photographing," "recording," and "broadcasting" as apply to the courtroom). As stated in the rule, "media coverage" is defined as "any photographing, recording, or broadcasting of court proceedings by the media using television, radio, photographic, or recording equipment." *Id.* "Photographing" is defined as "recording a likeness, regardless of the method used, including digital or photographic methods." *Id.* "Recording" is defined as "the use of any analog or digital service to aurally or visually preserve court proceedings." *Id.* "Broadcasting" is defined as "a visual or aural transmission or signal, by any method, of the court proceedings, including any electronic transmission or transmission by sound waves." *Id.* This statute exemplifies a rule a common rule that court proceedings may not be recorded or photographed unless done so in such a way that "ensures the fairness and dignity of the proceedings are not adversely affected." *Id.* See also *Chandler v. Florida*, 449 U.S. 560, 565-66 (1981) (establishing the benefits of allowing the media to cover judicial court proceedings under guidelines). The guidelines at issue in this case included the allowance of only one camera and one camera technician within the courtroom, whilst the equipment remained in a fixed location during the trial, and required any additional recording devices to be kept outside of the courtroom. *Id.*

With the exception of the courtroom, courts are generally more lenient when allocating First Amendment rights to film scenery, people, and activities as a matter of furthering the public interest.³⁷ The public has the right to videotape and sound-record conversations that are held in public, so long as those engaging in conversation would otherwise be overheard by others that are not involved in the conversation, and the recording is done so with a device that is readily apparent and available.³⁸ In *Smith v. Cumming*, the Court ruled that the First Amendment protects citizens by granting them the right to gather information about what public officials do on public property, specifically granting them the right to record.³⁹ This grants the public the right to record the police undergoing public duties.⁴⁰ Courts see a great public interest in allowing this, for it provides the public with the freedom and ability to “discuss publicly and truthfully all matters of public concern without previous restraint or fear of subsequent punishment.”⁴¹

B. The Circularity of the First and Fourth Amendments

With the development of the First Amendment allowing for citizens to publically film the police, protections are also granted to citizens when facing the reverse situation – police officers recording the public with their own iPhones.⁴² People are specifically protected

³⁷ See *Smith v. Cumming*, 212 F.3d 1332, 1333 (11th Cir. 2000) (declaring that the public has a First Amendment right to record as a matter of public interest).

³⁸ See Wash. Rev. Code Ann. § 9.73.030 (West 2016) (presenting instances where video and audio recording is acceptable in public places). See also *Fordyce v. City of Seattle*, 55 F.3d 436, 439 (9th Cir. 1995) (applying the Revised Code of Washington to the recording of police officer’s public duties).

³⁹ See *Smith*, 212 F.3d at 1333 (distinguishing the right to film as a means of gathering information as to what a public official does on public property).

⁴⁰ See *id.* (explaining that the public has a right to record police activity on public property under the First Amendment). This is subject to restrictions of reasonable time, manner, and place. *Id.*; see also *ACLU v. Alvarez*, 679 F.3d 583, 608 (7th Cir. 2012) (determining that video recording police officers while conducting their police duties is likely constitutional under the First Amendment).

⁴¹ See *ACLU*, 679 F.3d at 597, 598 (presenting a public policy reason for allowing the public to video record the police while carrying-out public duties).

⁴² See *Blitz*, *supra* note 34, at 75 (juxtaposing the propositions that while an individual has a right to record police officers, it is also conceivable that the same individual has a constitutional right to not be recorded by those same police officers).

under the Fourth Amendment of the Constitution, the right to be protected from unconstitutional searches and seizures, when the police film citizens with their own camera phones.⁴³ Under the Fourth Amendment, the public is heavily protected from unreasonable searches conducted by the police, especially when applied to smartphone searches.⁴⁴ Interestingly, police officers can engage in these searches in two forms.⁴⁵ The first instance occurs when the police are not simply observing, but recording images or sounds of other people, even in a public space.⁴⁶ If this allows a public official to record an event that they would otherwise not be able to see or hear, the recording is lawful.⁴⁷ Secondly, police are allowed to record members of the public when they allow themselves to catch glimpses of details on a person, or items a person is carrying, in order to see information that they would otherwise be unable to obtain without a pat-down or another form of search.⁴⁸ This includes using a camera that is not in a remote location, such as a suspended drone or a camera that is mounted on a police car (a “dash cam”), or using a zoom feature to see details of an image that the naked eye would not

⁴³ See U.S. CONST. amend. IV (stating that individuals have the right to be protected from unreasonable searches and seizures of their persons, houses, papers and effects).

⁴⁴ See *id.* (outlining the protections for the public regarding unlawful searches conducted by the police). See also Blitz, *supra* note 34, at 28 (clarifying that a police officer does not begin to search an individual’s smartphone by simply turning the phone’s camera on). A search of an individual’s smartphone begins when police officers obtain information that they would not have been able to obtain otherwise. *Id.*

⁴⁵ See Blitz, *supra* note, 34 at 28 (describing that a search also occurs in public “when police magnify and observe details on a person...so as to reveal information that would not otherwise have been apparent without a pat-down.”).

⁴⁶ See Blitz, *supra* note 34, at 28 (specifying that the police are not entitled to record citizens in public spaces using an iPhone or other smartphones when they are able to see or hear events they would not otherwise see or hear without the recording).

⁴⁷ See Blitz, *supra* note 34, at 28 (explaining that a police officer does not conduct a search by merely turning on a recording device, but they may not be able to legally conduct the search if they capture something with the recording they otherwise would not see or hear).

⁴⁸ See Blitz, *supra* note 34, at 28 (exhibiting circumstances that allow the police to record citizens while in public in order to obtain images that they would not otherwise be able to see or find without a pat-down).

otherwise be able to.⁴⁹ To courts, these cameras are different from police “uniform cams,” which are designed to record interactions between police and citizens.⁵⁰ More states are passing legislation to allow officers to wear uniform cameras if they choose to do so, with most of the country committing to implementing the devices within the next year.⁵¹ The intention of these cameras is to create an atmosphere where both the officer and citizens are held accountable for their actions during encounters in lieu of collecting mass amounts of data from dash cams or personal iPhones of individuals that happen to be in the vicinity of the police officer.⁵²

The balance between the public’s allowance to record the police in nearly any public encounter, and the police’s limited right to

⁴⁹ See Blitz, *supra* note 34, at 60 (distinguishing between cameras that are used to capture a police officer’s daily activities, including cameras mounted on police cars, a police officer’s use of an iPhone, or a camera on his uniform, which are not protected under the Fourth Amendment).

⁵⁰ See Blitz, *supra* note 34, at 60-61 (giving an example of the types of cameras that are protected under the Fourth Amendment when police are recording citizens in their line of duty).

⁵¹ See Fiona Blackshaw & Dan Matos, *Features: Police Body-Worn Cameras Legislation Tracker*, URBAN INSTITUTE (Jan. 1, 2017), archived at <https://perma.cc/FK2E-8MBE> (providing data for where each state stands on police body camera legislation). As of January 1, 2017, there are many different laws that are both directly related and applicable to police body cameras. *Id.* As of 2017, there are thirty states that prohibit only audio recordings, but video recordings with no sound may be permissible. *Id.* Thirteen states require two or all parties to consent to the video recording. *Id.* Forty-three states restrict recording where there is a reasonable expectation of privacy. *Id.* In all states besides New Hampshire, law enforcement may choose to withhold records in order to protect active investigations, public safety, or national security. *Id.* Sixteen states dictate when police body cameras may be used. *Id.* Twenty-six states restrict the public access to footage collected via police body cameras. *Id.* See also Ben Seal, *Police Body Camera Legislation Clears Senate*, THE LEGAL INTELLIGENCER, Oct. 20, 2016, at 9 (informing the state of Pennsylvania that the allowance of police body cameras passed in the Senate, hoping to heighten police accountability); Mike Maciag, *Survey: Almost All Police Departments Plan to Use Body Cameras*, GOVERNING (Jan. 26, 2016), archived at <https://perma.cc/24GB-XXAF> (stipulating that 95 percent of police departments have either committed to wearing body cameras or have already completed their implementation).

⁵² See Blitz, *supra* note 34, at 60 (stating that the public policy concern for requiring police officers to wear a “uniform ca[m]” is to archive officers’ individual activities, and not to intrude on specific individuals’ privacy).

record the public while on duty is striking.⁵³ As previously mentioned, several courts have determined that individuals have a First Amendment right to record the police in public, so long as they are performing public duties.⁵⁴ Scholars have attributed this delayed development in laws in contrast to the rapid development of smartphone cameras, referring to it as a “modern form of note taking.”⁵⁵

C. History of Patent Law

While the United States Constitution grants citizens the right to freedom of religion, speech, press, and expression, it also empowers Congress “to promote the Progress of Science and useful Arts, by securing for limited Times to Authors and Inventors the exclusive Right to their respective Writings and Discoveries.”⁵⁶ In simpler terms, Americans have the right to invent things and ensure that no one else can copy their invention, creating a patent.⁵⁷ Meanwhile, as

⁵³ See Blitz, *supra* note 34, at 60-61 (quoting a former police chief who identified “uniform cams” as one of the most effective ways “to collect and preserve the best evidence about every encounter between the police officer and the community.”); *ACLU v. Alvarez*, 679 F.3d 583, 597 (7th Cir. 2012) (noting audio and visual records are communication technologies, and thus protected by the First Amendment because they are forms speech). Individuals’ First Amendment rights could be infringed upon if all nonconsensual audio recording was criminalized. *Id.*

⁵⁴ See *Fordyce v. City of Seattle*, 55 F.3d 436, 439 (9th Cir. 1995) (discussing that Washington “does not prohibit the videotaping or sound-recording of conversations held in a public street, within the hearing of persons not participating in the conversation, by means of a readily apparent recording device.”). The public has a First Amendment right to record police officers and other public officials when the situation falls under the Washington Code. *Id.*

⁵⁵ See Blitz, *supra* note 34, at 75-76 (indicating how some courts have found that individuals who record police officers while in public, on iPhone cameras can be protected by the First Amendment).

⁵⁶ See U.S. CONST. art. I, § 8, cl. 8 (granting inventors the rights to their research and discoveries through patents and copyrights).

⁵⁷ See Malla Pollack, *What is Congress Supposed to Promote?: Defining “Progress” in Article I, Section 8, Clause 8 of the United States Constitution, or Introducing the Progress Clause*, 80 NEB. L. REV. 754, 756 (2001) (clarifying the intention of Congress to create temporary individual rights for authors and inventors who can exclude others from use of their inventions, as long as their inventions promote the spread of knowledge and are useful to the public). At the 1787 Constitutional Convention, delegates suggested that Congress would have the power “to grant patents for useful inventions,” and to advance knowledge and discoveries. *Id.* at 786.

the First Amendment has evolved to accommodate the rise of technology, the way patent laws are interpreted has also evolved, especially due to the difficulty that comes with phrasing the patent to conform to the specifications required.⁵⁸ For nearly twenty years, courts and professionals in the patent law field have ruled that patents are to be interpreted as to the plain meaning of the claim in which they make.⁵⁹ Similarly, when the claims within patents are unclear, courts have used a patents description in order to determine whether the inventor has interpreted any terms in a manner that is considered inconsistent from their ordinary meaning.⁶⁰

One of the most important features of patent law is the Doctrine of Equivalents.⁶¹ The intention of the Doctrine of Equivalents is

⁵⁸ See 35 U.S.C. § 112 (2012) (recognizing the need for “full, clear, concise, and exact terms” in patent language in order to avoid infringement). *Markman v. Westview Instruments*, 517 U.S. 370, 373-74 (1996) (declaring the two distinctive elements in regards to a patent document). The first element is that the patent document must contain “full, clear, concise, and exact terms” as to enable any person in that field to understand the patent. *Id.* The second element is that the patent document must include “one or more claims,” which describe the exact subject matter in which the invention is applicable. *Id.*; *Laitram Corp. v. Cambridge Wire Cloth Co.*, 863 F.2d 855, 857 (Fed. Cir. 1988) (affirming the need for precise wording in order to avoid the potential infringement of a competitor).

⁵⁹ See *Markman*, 517 U.S. 370 at 373 (articulating the importance of stating a claim when defining the scope of a patent grant); *Solomon v. Kimberly-Clark Corp.*, 216 F.3d 1372, 1378 (Fed. Cir. 2000) (ruling that the language of a patent must be interpreted “in light of the teachings of the prior art and of the particular application disclosure as it would be interpreted by one possessing the ordinary level of skill in the pertinent art.”); Gene Quinn, *Ordinary Plain Meaning: Defining Terms in a Patent Application*, IPWATCHDOG (Jan. 23, 2012), archived at <https://perma.cc/7D9Y-CZSS> (claiming that patent language claims are to be interpreted with the ordinary plain meaning of the term used).

⁶⁰ See *Vitronics Corp. v. Conceptronic*, 90 F.3d 1576, 1580 (Fed. Cir. 1996) (describing the patent holder’s term as defined in the specification part of the patent can be different than the plain meaning of the term); see also HERBERT F. SCHWARTZ, *PATENT LAW AND PRACTICE* 12 (Federal Judicial Center, 2nd ed. 1995) (suggesting words in the patent application will not be held to the plain meaning if the drafter specifically defines the words being used in the uncommon manner).

⁶¹ See *Laitram Corp.*, 863 F.2d at 857 (explaining that the Doctrine of Equivalents applies when the patent may not match the literal definition of the competitor, but nevertheless is equivalent to the competitor’s invention, and can still be considered a patent infringement).

to prevent competitors from pirating the nature and core of an invention, while narrowly avoiding the literal language of its claims.⁶² Courts want to prevent other inventors from stealing the benefits of the inventions of others.⁶³ When determining if a patent has violated the Doctrine of Equivalents, they look at whether the spacing in the accused product is equal to that in the claim, or if the interventions are “substantially the same, used in substantially the same way, to achieve substantially the same result.”⁶⁴ This is more of an exception to the rule as opposed to the rule itself, but this is how a company or holder of a patent would prevail under the Doctrine of Equivalents.⁶⁵ In *Laitram Corp. v. Cambridge Wire Cloth Co.*, the court interpreted the Doctrine of Equivalents as something that molds with the “real business world,” for “words are not misappropriated; claimed inventions are.”⁶⁶

⁶² See 35 U.S.C. § 112 (2012) (articulating that “the specification shall contain a written description of the invention” and present in a full, clear, concise, and exact terms that would enable any person to make sense of the invention); see also *Laitram Corp.*, 863 F.2d at 856-57 (defining the Doctrine of Equivalents as a judicially created necessity of determining infringement without the risk of injustice that would ensue just relying on words alone).

⁶³ See *Graver Tank & Mfg. Co. v. Linde Air Prods. Co.*, 339 U.S. 605, 608 (1950) (identifying that the Doctrine of Equivalents protects patentees by broadening the scope of their original patent application to expand as the creation of their invention unfolds); see also *Royal Typewriter Co. v. Remington Rand*, 168 F.2d 691, 693 (2d Cir. 1948) (expressing that the Doctrine of Equivalents is necessary because inventors may become conflicted between confining and abandoning ideas due to the specifics of their grant).

⁶⁴ See *Laitram Corp. v. Cambridge Wire Cloth Co.*, 863 F.2d 855, 859 (Fed. Cir. 1988) (illustrating that in applying the doctrine of equivalents, the court should not become concerned with the small details of the claim, but instead focus on if the changes of the inventions are consistent with the overall idea of the claim).

⁶⁵ See *Graver Tank*, 339 U.S. at 608-09 (noting that if a device performs the same or a similar function of a patented article, but in a substantially different way, the Doctrine of Equivalents may be used to restrict the claim and defeat the patentee’s action for infringement).

⁶⁶ See 863 F.2d at 857 (emphasizing the Doctrine’s importance by distinguishing between strict adherence to the text and the recognition or real world business implications).

D. First Amendment Right to Buy and Use Patented Material

According to the United States Code, patents have “the same attributes as personal property” does.⁶⁷ With the granting of a patent, the patentee has the exclusive right to use the patented material.⁶⁸ In fact, even the United States government lacks the right to use a patented invention without permission or compensation to the owner.⁶⁹ The selling of patents to another person for use is referred to as “licensing,” where one person gets to sell the product or service that was designed, while the original inventor of the patent gains royalties.⁷⁰ In some cases, the selling of a patent without proper authority is classified as an infringement.⁷¹ When selling a patented invention, or granting someone the right to use or make the patent, many substantial rights to the patent are granted.⁷²

Consumers have a right to purchase materials and goods, which is protected by the Commerce Clause of the United States Constitution.⁷³ Consumers also have a First Amendment right to purchase materials as they desire, for this constitutes as a freedom of expression – a protected right under the First Amendment.⁷⁴ However, consumers do not have a First Amendment right to purchase obscene

⁶⁷ See 35 U.S.C. § 261 (2012) (stating that the Patent and Trademark Office shall maintain a registry of interest in patents and applications for patents).

⁶⁸ See *id.* (providing a patentee the right to grant and convey exclusive rights under the patent).

⁶⁹ See *James v. Campbell*, 104 U.S. 356, 358 (1881) (determining that no government entity has the right to use a patented invention without permission from the owner, or compensation to the owner).

⁷⁰ See Robert A. Matthews, Jr., *Defining Patent Licenses*, 5 ANN. PATENT DIGEST (MATTHEWS) § 35:28 (2018) (limiting the ability to license a patent to instances where the licensing is a reasonable and necessary incentive to attract needed investment or promote the invention’s utilization).

⁷¹ See 35 U.S.C. § 271(a) (2010) (explaining that “whoever without authority makes, uses, offers to sell, or sells any patented invention” during the term of the patent, infringes the patent, except otherwise provided in the statute).

⁷² See *Watkins v. United States*, 149 F. Supp. 718, 721 (Conn. Dist. Ct. 1957) (pontificating on the assignment or sale of a patent to be the conveyance of “all substantial rights to the patent”).

⁷³ See U.S. CONST. art. 1, § 8, cl. 3 (establishing the Commerce Clause in the United States Constitution). The Commerce Clause grants the United States Congress the right “to regulate Commerce with foreign Nations, and among the several States, and with the Indian Tribes.” *Id.*

⁷⁴ See U.S. CONST. amend. I (limiting Congress’s power to abridge the freedom of speech, press, and assembly).

or disturbing materials and goods, unless for private use in the home.⁷⁵ The First Amendment does not protect “obscenity” within the scope of its protections of speech, press, and expression.⁷⁶ In fact, in *Stanley v. Georgia*, the court noted that:

“[i]f the First Amendment means anything, it means that a State has no business telling a man, sitting alone in his own house, what books he may read or what films he may watch. Our whole constitutional heritage rebels at the thought of giving government the power to control men’s minds.”⁷⁷

Therefore, any person that is protected under the United States Constitution has a First Amendment right to buy any materials that they please, so long as they are not illegal or obscene.⁷⁸

When consumers purchase patented material, they are subject to the right to use it.⁷⁹ This is known as patent exhaustion, which is an affirmative defense to a claim of patent infringement.⁸⁰ According to *Quanta Computer, Inc. v. LG Electronics, Inc.*, “[t]he longstanding doctrine of patent exhaustion provides that the initial authorized sale of a patented item terminates all patent rights to that item.”⁸¹ According to the courts, the doctrine of patent exhaustion rests upon the theory that the sale of a device that is patented “exhausts” the inventor’s right to control the way in which the consumer uses that item

⁷⁵ See *United States v. 12 200-Ft. Reels of Super 8mm Film*, 413 U.S. 123, 126-27 (1973) (explaining that the right to possess obscene material in the home does not create a “right to acquire it or import it from another county”); *Stanley v. Georgia*, 394 U.S. 557, 559 (declaring that the mere private possession of obscene material cannot be a crime under the constitution).

⁷⁶ See *Stanley*, 394 U.S. at 560 (affirming that obscenity is not protected by the First Amendment).

⁷⁷ See *id.* at 565 (justifying the protection of obscene material when held privately in the home under the First Amendment).

⁷⁸ See *id.* (arguing that the “mere categorization of films as ‘obscene’ is [an] insufficient justification” for invasion of First Amendment rights).

⁷⁹ See *Keurig, Inc. v. Sturm Foods, Inc.*, 732 F.3d 1370, 1374 (Fed. Cir. 2013) (arguing that consumers have the right to use patented material once they purchase it).

⁸⁰ See *ExcelStor Technology, Inc. v. Papst Licensing GMBH & Co. KG*, 541 F.3d 1373, 1376 (Fed. Cir. 2008) (quantifying patent exhaustion is an affirmative defense, not a cause of action).

⁸¹ *Quanta Computer, Inc. v. LG Electronics, Inc.*, 553 U.S. 617, 625 (2008).

thereafter.⁸² This is because the inventor has already received the monetary benefits for the goods, and can no longer determine the way in which people use it.⁸³

III. Premise

A. *The Infrared Data Patent*

Apple's Infrared Data Patent was granted on June 28, 2016.⁸⁴ The patent was designed to use infrared data with a special camera that has the ability to detect images by using visible light.⁸⁵ The language of the Infrared Data Patent refers to "camera 107" in order to explain how the technology works.⁸⁶ Apple discloses Camera 107 as reference to any technological device that has the ability to detect images based on visible light.⁸⁷ In simpler terms, "infrared" refers to the part of an electromagnetic spectrum that has a longer wavelength than red wavelengths.⁸⁸ Infrared signals are "directional" and must

⁸² See *Keurig*, 732 F.3d at 1374 (determining the rationale behind the theory of patent exhaustion which takes into consideration the interests of both the manufacturer and the end consumer).

⁸³ See *id.* (describing the reason as to why a patentee cannot manipulate the way in which consumers use their patented device once it is purchased).

⁸⁴ See U.S. Patent, *supra* note 5 (dating the approval of the patent).

⁸⁵ See U.S. Patent, *supra* note 5 (introducing the Infrared Data Patent and how it is designed to work).

⁸⁶ See U.S. Patent, *supra* note 5 (using "camera 107" in order to describe the physics behind infrared technology and how it applies to the Infrared Data Patent).

⁸⁷ See U.S. Patent, *supra* note 5 (explaining how "camera 107" uses infrared technology to detect images and eventually disable the camera from recording them). For example, "camera 107" has the ability to detect single pictures or videos based on the visible light surrounding them. *Id.* "Camera 107" also has the potential to use encoded data to detect images that include infrared signals. *Id.* In some devices, "camera 107" may contain a filter that blocks the light of certain wavelengths, including filters that block infrared light that is emitted near the edge of the visible light spectrum. *Id.* This camera may also include sensors for detecting both visible and infrared light, regardless of the environment. *Id.*

⁸⁸ See Kevin A. Rieffel, *Can Apple's New Infrared Patent Really Disable Your iPhone?*, IPWATCHDOG (July 6, 2016), archived at <https://perma.cc/WG8L-U5S8> (clarifying the language used in the patent and the physics behind infrared technology). Infrared signals are invisible to the human naked eye. *Id.*; see also *Software License Agreements*, APPLE (2018), archived at <https://perma.cc/5NNR-LGZ4> (explaining binding nature of the software license agreements with Apple).

be aimed at a particular target to work appropriately.⁸⁹ Thus, the Infrared Data Patent will not disable the iPhone camera unless it is directly pointed at a target that is not meant to be photographed or recorded.⁹⁰

Infrared signals work by locating a transmitter in areas where photography and video recordings are prohibited, such as a stage at a live concert.⁹¹ These transmitters contain data that includes commands to temporarily disable the recording function on the device.⁹² This means that the concert organizers working for the venue, or the performers themselves, would be able to set up their own infrared signal device that prevents the audience from recording the show.⁹³

Apple allegedly sought to use the pre-existing infrared technology and application for the Infrared Data Patent as a way of preventing iPhone users from capturing and recording musical artists at concert venues.⁹⁴ With the rapid adoption of smartphone technology, especially iPhones, musical artists are suffering from viewers recording their copyrighted material.⁹⁵ Additionally, there are complaints

⁸⁹ See Rieffel, *supra* note 88 (demonstrating how the infrared technology adopted by Apple works).

⁹⁰ See Rieffel, *supra* note 88 (explaining how the infrared technology works much like your TV remote in that it needs to be pointed and directed).

⁹¹ See Don Reisinger, *Apple's Latest Patent Would Stop You From Recording Concerts*, FORTUNE 500 (June 28, 2016), archived at <https://perma.cc/54FT-2RNE> (explaining how infrared signals work to prevent people from recording and photographing objects that are not supposed to be recorded).

⁹² See *id.* (articulating the way in which infrared signals utilize encoded data to disable the recording function on a smartphone or similar device).

⁹³ See *id.* (depicting a scenario in which one would be able to set up a series of infrared signals to prevent concert attendees from recording the artist).

⁹⁴ See U.S. Patent, *supra* note 5 (exemplifying concerts as a primary location for the use of the patent). The language of the patent reads that the function of the patent is to send “infrared data [that] comprises a disable command to render a function of an electronic device temporarily inoperable.” *Id.*; see also Guardian Music *supra* note 4 (identifying two types of concert-goers, those who record and those who watch).

⁹⁵ See Guardian Music, *supra* note 4 (justifying musical artist’s discouragement with fans filming at concerts). Artists are consistently annoyed with fans using their phones to photograph and record at concerts after the artist asks them to refrain from that practice. *Id.* Musical artists are now discouraged from releasing new songs for the risk of them being uploaded to the Internet before an official release date. *Id.* With unauthorized uploads to websites, such as YouTube, artists are losing on royalty payments for their work. *Id.*

made by concert performers and concert attendees, citing the distraction of fellow concert viewers using their smartphones to record and photograph the show.⁹⁶

However, recording at concerts is only one scenario in which the Infrared Data Patent might be put to use.⁹⁷ There are several locations and situations in which people are told not to record or photograph an event, or to put their phones away all together.⁹⁸ Some of these instances include the prevention of video recording in movie theaters and plays, photography within museums, art galleries, and exhibits, as well as blocking photography and video recording in sensitive locations.⁹⁹ Some of these sensitive locations could include encounters with the police, disturbances amongst fellow citizens, or showcasing public officials.¹⁰⁰

With the heightened number of people using smartphones, it is evident that these people strongly dislike being told when and how to use them.¹⁰¹ Aside from cellphone use at concerts, American's obsessive use of their smartphone is present in several everyday aspects of life, which cause distractions and delay productivity.¹⁰² Some of

⁹⁶ See *Guardian Music*, *supra* note 4 (pointing out how filming at concerts can distract those viewing around you).

⁹⁷ See *Lovejoy*, *supra* note 9 (providing other valuable uses for Apple's patent, including movie theaters).

⁹⁸ See *Guardian Music*, *supra* note 4 (stressing that musicians at concerts often ask, or demand that their fans not record their live performances).

⁹⁹ See *Lovejoy*, *supra* note 9 (pointing to instances in which Apple's recording-blocking technology could best be implemented).

¹⁰⁰ See *Smith v. City of Cumming*, 212 F.3d 1332, 1333 (11th Cir. 2000) (requiring that the police be performing a public duty on public property if they are to be lawfully filmed by citizens); see also AMY GAJDA, *THE FIRST AMENDMENT BUBBLE: HOW PRIVACY AND PAPARAZZI THREATEN A FREE PRESS* 6-7 (2015) (articulating the right that people, especially journalists and the paparazzi, have to film and record public officials); see also *Blitz*, *supra* note 34, at 28 (explaining how a public search occurs when recording technology allows officials to record events that they would not be able to hear or see otherwise).

¹⁰¹ See Richard Freed, *Why Phones Don't Belong In School*, HUFFPOST (Apr. 13, 2017), archived at <https://perma.cc/Q39A-YEPH> (citing a recent documentary as evidence that teachers often struggle to keep youths from using their digital devices in the classroom).

¹⁰² See Casey Phillips, *How Smartphones Revolutionized Society in Less than a Decade*, GOVERNMENT TECHNOLOGY (Nov. 20, 2014), archived at <https://perma.cc/2ELR-VYNZ> (describing the notion that people claim to obsessively check their smartphones and require a constant connection). As of 2013, an average smartphone user will use their phone for three hours and fifteen minutes each day, nearly doubling since 2011. *Id.* Recent studies suggest that as much as

these include longer wait times at restaurants, a lack of exercise, and distractions in school.¹⁰³ As iPhone apps continue to expand, especially those that are photo and video centered, such as Snapchat and Instagram, users continue to become distracted by these features.¹⁰⁴ For example, the patent description poses the possibility of utilizing infrared signals that are located near museum exhibits.¹⁰⁵ With this technology, museum goers will have the opportunity to use their iPhone cameras to scan a photo of a painting or exhibit, and instead of saving the photo to the iPhone camera roll, the viewer will be provided with information about the art in which they are looking at.¹⁰⁶ With this, it is clear that technological innovators are attempting to bring the convenience of smartphone usage not only into the activities of our everyday lives, but also into special events, such as visiting a museum.¹⁰⁷

With the rise of both social media and smartphone technology, there have been several concerns involving the ways in which

sixty percent of smartphone users do not go more than an hour without checking their device. *Id.* That percentage increases to nearly seventy-five percent for users between the ages of eighteen and thirty-four. *Id.* These concerns are especially true for children. *Id.*

¹⁰³ See John Dodge, *Restaurant Wait Times Skyrocket, And Consumers May Be to Blame*, CBS CHICAGO (July 23, 2014), archived at <https://perma.cc/3QZ8-46AZ> (attributing the cause of longer wait times at restaurants to the frequency of diners using their smartphones).

¹⁰⁴ See Taylor Stinson, *#Bored: How Social Media Is Making This Generation Distracted and Unhappy*, ELITE DAILY (Apr. 17, 2014), archived at <https://perma.cc/FWY9-YA86> (spelling out the reasons as to why so many people are distracted due to apps similar to Instagram). The concept of the “fear of missing out” is propelled by apps such as Instagram due to the creation of social comparisons. *Id.*; see also Joel Feldman, *The Snapchat Distracted Driving Lawsuit: What Legal and Moral Responsibilities do App Manufacturers Have with Respect to Distracted Driving*, THE HUFFINGTON POST (May 2, 2016), archived at <https://perma.cc/SME6-BGXR> (warning Snapchat users of the risk of distracted driving when using the app). Snapchat is currently facing a lawsuit in Georgia due to an eighteen-year-old driver using the app while driving, causing a crash that resulted in severe permanent brain damage to another victim. *Id.*

¹⁰⁵ See U.S. Patent, *supra* note 5 (noting the benefits of utilizing the Apple patent at museums so that people are able to convey information about an exhibit).

¹⁰⁶ See U.S. Patent, *supra* note 5 (describing the opportunity for iPhone users to learn about the surrounding environment by using their iPhone camera).

¹⁰⁷ See U.S. Patent, *supra* note 5 (presenting the convenience of utilizing technology in places that provide educational benefit).

consumers use their devices.¹⁰⁸ For example, studies find that consumers are increasingly reliant on using the location services settings on iPhones, for purposes like sharing their location on social media.¹⁰⁹ Consumers now use their smartphones to complete simple tasks, such as sending a text using voice activation and keeping up with developing news information.¹¹⁰ Less than ten years ago, consumers had to rely on the television, the newspaper, a phone call, or word of mouth to receive information on breaking news or exciting events.¹¹¹ Amber Case, a cyber-anthropologist and CEO of the mobile platform, Geoloqui, describes this rapid adoption of smartphone technology as “the first time in the entire history of humanity that we’ve connected in this way ... And it’s not that machines are taking over. It’s that they’re helping us to be more human, helping us to connect with each other.”¹¹² With this, it is obvious that people, especially Americans, are heavily reliant on their smartphone devices.¹¹³ Therefore, if the way in which people use their iPhone has the potential to change, there will be some serious backlash from the general public.¹¹⁴

¹⁰⁸ See U.S. GOV’T ACCOUNTABILITY OFF., GAO-16-317, INFORMATION AND ISSUES REGARDING SURREPTITIOUS TRACKING APPS THAT CAN FACILITATE STALKING (2016) at 1,4 [hereinafter *Information and Issues*] (explaining the issues in regard to using location services settings in iPhone apps). By using location services and constantly updating one’s location, consumers face the risk of others accessing very personal information, such as tracking one’s whereabouts, and even one’s place of residence. *Id.*

¹⁰⁹ See *id.* at 10 (identifying forms of applications that consumers heavily rely on, such as those which implement location services and various forms of social media).

¹¹⁰ See Phillips, *supra* note 102 (describing the rapid adoption of smartphones and how it has changed the way people receive and send information).

¹¹¹ See Phillips, *supra* note 102 (recalling the past decade and the changes that smartphones have made in one’s ability to keep up with the news).

¹¹² See Phillips, *supra* note 102 (quoting an expert in the smartphone industry, Amber Case, who claims that smartphone adoption has allowed human beings to become “more human”). Case argues that smartphones allow people to become “a digital extension” of themselves. See *id.* (comparing the usage of smartphones with human traits).

¹¹³ See Phillips *supra* note 102 (claiming that the public is so heavily reliant on their smartphone usage that it borders on the point of obsessive compulsion).

¹¹⁴ See Kaveh Waddel, *What If Cameras Stopped Telling the Truth?*, THE ATLANTIC (Jul. 2016), archived at <https://perma.cc/8HGW-5TFG> (identifying negative backlash as market forces that may dissuade technological advances in camera-blocking technology, such as infrared jamming).

B. Smartphone's Influence on Major Social Movements

Technology, especially involving smartphone cameras, has been crucial in propelling social movements throughout the world.¹¹⁵ So much so, that scholars have dubbed this era as the “Information Revolution.”¹¹⁶ Michael Saylor, author of *The Mobile Wave* and CEO of MicroStrategy, claims that, “The Agricultural Revolution took thousands of years to run its course. The Industrial Revolution required a few centuries. The Information Revolution, propelled by mobile technology will likely reshape our world on the order of decades.”¹¹⁷ However, with the widespread availability of information, the “Information Revolution” has brought about major social uprisings that are driven by social media.¹¹⁸

The first of these social movements that are attributed to iPhone camera recording and social media considered to arise is the Arab Spring, beginning in December 2010.¹¹⁹ This movement is attributed to the youth population in Egypt who used social media to communicate and coordinate large demonstrations without being censored by the government.¹²⁰ While everyone in the United States has a First Amendment right to express themselves using social media as

¹¹⁵ See Roland Banks, *Smartphones and Social Media: Driving Political Revolution*, MOBILE INDUSTRY REVIEW (Jan. 19, 2015), archived at <https://perma.cc/7DHU-BEPA> (highlighting the significance that technology has had on global social movements).

¹¹⁶ See *id.* (describing the current era as the “Information Revolution” that is being propelled by mobile technology).

¹¹⁷ See *id.* (juxtaposing various global revolutions and the implications of the Information Revolution propelled by smartphone adoption).

¹¹⁸ See *id.* (observing the rise of social movements due to social media).

¹¹⁹ See *id.* (classifying the Arab Spring as heralding the dawn of a new political landscape largely influenced by young activist who used social media). The Arab Spring is a series of democratic uprisings in the countries of Egypt, Libya, Syria, Yemen, Bahrain, Saudi Arabia, and Jordan in 2010 and 2011. See also *The ‘Arab Spring’: Five Years On*, AMNESTY INTERNATIONAL, archived at <https://perma.cc/9RC4-3DDU> (providing a timeline of the Arab Spring and its causes). Here, several leaders that had been in power for years were overthrown with the hope of replacing them with democratic leaders. *Id.* But, the end result thus far has been a series of violence and war, inducing fear in those citizens that wish to speak out for a more open, democratic society. *Id.*

¹²⁰ See Banks, *supra* note 115 (attributing the lack of governmental censorship on social media outlets, such as Twitter and Facebook, to the organizing of major social and political rallies during the Arab Spring in 2010).

their outlets, this is not the case in several countries throughout the world.¹²¹ In order to do this in the Arab world, younger generations to social media platforms, particularly Facebook and Twitter.¹²² Initially, the use of social media was to organize political and social rallies within their respective countries, eventually turning into a way for people to document their daily activities and eyewitness accounts of political protests.¹²³ With this movement and its use of social media, people throughout the world were able to follow everything that occurred during the Arab Spring with the use of text messages, photographs, videos, and location services.¹²⁴ In comparison to previous movements, where only traditional media outlets were available, this provided an entirely new viewpoint of global social movements.¹²⁵

Even since the Arab Spring began in 2010, smartphone platforms for propelling social movements have expanded.¹²⁶ Today, iPhones can be equipped with apps such as Instagram and Vine that allow photos and videos to be posted.¹²⁷ GroupMe allows for groups

¹²¹ See U.S. CONST. amend. I (depicting the First Amendment right to freedom of expression that exists in the United States); see also Banks, *supra* note 115 (listing the countries where citizens are or were oppressed by their governments, lacking the right to film and express themselves on social media outlets).

¹²² See Banks, *supra* note 115 (detailing the social media platforms that were used by the Arab youth population in order to propel social change).

¹²³ See Banks, *supra* note 115 (providing an explanation as to what type of information was being posted to social media by the youth population during the Arab Spring).

¹²⁴ See Banks, *supra* note 115 (explaining the technological methods that were used to create a global impact using social media during the Arab Spring in 2010). Specifically, in Egypt these platforms were used to expose atrocities through live streams of Tahrir Square moments. *Id.* In Hong Kong, protesters used the Fire-Chat app, which was able to bypass the government's attempts to suppress information concerning the democratic protests. *Id.* In Tunisia, protestors used Facebook to upload pictures and videos in efforts to encourage others to join the movement, while the Tunisian government attempted to stifle efforts. *Id.*

¹²⁵ See Banks, *supra* note 115 (concluding smartphone technology as an outlet for the average person to become involved with political and social movements).

¹²⁶ See Banks, *supra* note 115 (depicting the Arab Spring as a smart-phone fueled revolution); see also Bijan Stephen, *How Black Lives Matter Uses Social Media to Fight the Power*, WIRED (Nov. 2015), archived at <https://perma.cc/QCG4-WW63> (drawing a parallel between the strategies of social media which are used in social movements today and the tactics used during the civil rights movements, where media is used to persuade citizens and push movements along).

¹²⁷ See Stephen, *supra* note 126 (noting the different video platforms that activist can utilize to publicly convey content in support of their ideology).

of people to message each other privately without the risk of authorities intercepting the information, while WhatsApp allows users to interact with people throughout the world.¹²⁸ Twitter lets users see and repost information to millions of other users at once.¹²⁹ While some of these platforms may have existed in 2010, they were nowhere near as widely used as they are today, making their impact that much greater.¹³⁰ These platforms helped to create the concept of “hashtag activism,” a term coined by media outlets to depict the role that social media had played in social movements when using hashtags on social media sites.¹³¹ In fact, with the uprising of social media websites as ways for people to get their news, major social movements that began years ago are still propelled by people posting information to those websites today.¹³²

¹²⁸ See Stephens, *supra* note 126 (depicting motivations for using private messaging apps in support of social movements, specifically citing the benefits of private correspondence between activists).

¹²⁹ See Stephens, *supra* note 126 (stating that the greatest access to individuals is found using Twitter, where millions of people can be mobilized from anywhere).

¹³⁰ See Banks, *supra* note 115 (citing journalists who have theorized that while some platforms did not exist in the time of certain revolutions, digital networks have acted as a positive supply chain to the spread of information, and have continued to do so until today).

¹³¹ See Eric Yaverbaum, *#HashtagActivism – Turning Whispers Into Shouts and Fighting Stigma With Story*, HUFFPOST (Dec. 6, 2017), archived at <https://perma.cc/QY9X-K7ZB> (explaining the rise of hashtag activism and defining the term as the embodiment of utilizing hashtags on social media sites as a way to mobilize movements in the United States). “Hashtagging” originated on Twitter as a way for users to coordinate conversations, which lead to the organization of protests during the Occupy Wall Street movement in 2011. *Id.* See Herstory, BLACK LIVES MATTER, archived at <https://perma.cc/N2C9-3BUJ> (Feb. 20, 2018) (providing an example of a matter in which an incident lead to hashtag activism, which is colloquially referred to as “#BlackLivesMatter”); see also CNN Library, *Trayvon Martin Shooting Fast Facts*, CNN (Feb. 7, 2016), archived at <https://perma.cc/7J2N-QENR> (describing the timeline of the Trayvon Martin shooting, which led to the social movement #BlackLivesMatter).

¹³² See Kalev Leetaru, *Why Apple’s Patent to Disable Your Phone’s Camera is So 1984*, FORBES (Jul. 31, 2016), archived at <https://perma.cc/8S5L-WC8H> (noting that the #BlackLivesMatter movement is still in full force and continuing to grow with the utilization of social media); see also Joshua Berlinger, Nick Valencia & Steve Almsy, , *Alton Sterling Shooting: Homeless Man Made 911 Call, Sources Say*, CNN (Jul. 8, 2016), archived at <https://perma.cc/83Z4-TTX6> (describing the events that lead to the shooting of Alton Sterling in Baton Rouge, Louisiana on July 5, 2016); Elliot C. McLaughlin, *Woman Streams Aftermath of Fatal Officer-Involved Shooting*, CNN (Jul. 8, 2016), archived at <https://perma.cc/P8HF-QU DP>

One of the most notable social movements that is attributed to hashtag activism and smartphone camera recordings occurred in June 2016, when Senate Democrats held what was supposed to be an indefinite filibuster on gun control, using the “#filibuster” in order to raise awareness.¹³³ This allowed for Americans to spread the word about the occurrence in the Senate, to watch live broadcast as to what was being said, and even for people to become educated on the topic of gun control in the United States and the filibuster concept.¹³⁴ At this time, media news outlets such as C-Span were blocked from entering the chamber, which could have prevented Americans from even knowing about the filibuster and what was argued for.¹³⁵ However, going against House rules, which bans cameras or other electronic devices on the floor, Senators turned to their smartphones and utilized Periscope, Twitter’s live-feed service, in order to broadcast

(summarizing how a woman created a live-stream of the shooting of Philando Castile in Minnesota on July 6, 2016).

¹³³ See Rachel Dicker, *Democrats Are Holding the Senate Floor Indefinitely for Gun Control, and the Internet is Going Nuts*, US NEWS (June 15, 2016), archived at <https://perma.cc/KTQ4-7U8D> (describing the 2016 Senate filibuster on gun control and its popularity on the Internet). A filibuster is a way to block or delay legislative action by holding the Senate floor in order to prevent a vote on a bill. See *Filibuster and Cloture*, UNITED STATES SENATE (Jan. 21, 2017), archived at <https://perma.cc/Y3KK-4Q5V> (detailing the concept and history of the filibuster, as used in the United States Senate). Senator Christopher S. Murphy of Connecticut led the filibuster on gun control in 2016 in order to force the Senator Mitch McConnell, the Senate majority leader, to allow votes on the Democrat’s amendments, to the annual Commerce, Justice, Science appropriations bill with a goal of making the United States’ gun control laws stricter. See David M. Herszenhorn, *Senator’s 15-Hour Filibuster Gains ‘Path Forward’ on Gun Control Measures*, N.Y. TIMES (Jun. 16, 2016), archived at <https://perma.cc/KJL6-S35C> (rationalizing the reasons for the 2016-gun control filibuster). The filibuster was in response to the shootings that took place at an Orlando night club in June of 2016, and Senator Murphy felt a “personal outrage” on the issue following the December 2012 shootings at Sandy Hook Elementary School in Newtown, Connecticut. *Id.*

¹³⁴ See Dicker, *supra* note 133 (depicting the social networking presence that stemmed with #fillibuster, illustrating its popularity and significance).

¹³⁵ See David M. Herszenhorn & Emmarie Huetteman, *House Democrats’ Gun-Control Sit-In Turns Into Chaotic Showdown With Republicans*, NEW YORK TIMES (Jun. 22, 2016), archived at <https://perma.cc/26CG-8AV5> (recognizing that major media news outlets were prevented from entering the Senate chambers during the gun control filibuster).

their efforts.¹³⁶ C-Span was then able to broadcast the Periscope feed that was recorded by Senator's smartphones, as if the broadcasting network was actually present.¹³⁷ Had this filibuster not been broadcasted, it is unknown as to whether the American public would have been informed of this important occurrence.¹³⁸

IV. Analysis

A. Open-Ended Issues that Apple Must Address

Clearly, iPhones have become extremely vital in changing the course of social landscape not only in America, but throughout the world.¹³⁹ With that, disabling iPhone cameras in public places by the police or the government should be forbidden, because doing so is a violation of the First Amendment of the United States Constitution.¹⁴⁰ Apple's decision to apply for the Infrared Data Patent was likely made in good faith in a continued effort to propel the iPhone's cutting-edge technology.¹⁴¹ While there are musical artists that already prevent people from using their phones at live performances, Apple's patent could take this one step further by disabling the camera only when it is pointed directly at the performer on stage.¹⁴² But, what are

¹³⁶ See *id.* (noting that the Senators participating in the filibuster went against House rules and used their smartphones to record the events of the filibuster after media news outlets were prevented from entering).

¹³⁷ See *id.* (disclosing the method in which C-Span broadcast smartphone video recording of the filibuster).

¹³⁸ See *id.* (explaining the unorthodox methods that lawmakers used to televise house proceedings during the filibuster, including using technology such as periscope to skirt the television blackouts, which is not permissible). If the effort to bypass the television blackout was not orchestrated by lawmakers, the information may not have been able to reach the general public. *Id.*

¹³⁹ See *supra* III (describing the rise of major social movements in the United States that were the result of, in part, iPhone video and photo footage that were uploaded to social media websites).

¹⁴⁰ See *Fordyce v. City of Seattle*, 55 F.3d 436, 439 (9th Cir. 1995) (determining that Americans have the right to film as a means of gathering information as to what a public official does on public property).

¹⁴¹ See U.S. Patent, *supra* note 5 (outlining the possible uses for Apple's Infrared Data Patent).

¹⁴² See Rieffel, *supra* note 88 (referring to other instances in which performers block people from recording at their live performances). For example, Alicia Keys makes her concert attendees lock their smartphones in a pouch for the duration of her shows. *Id.*; see also Travis M. Andrews, *With Apple's Help, Alicia Keys Might*

the implications for an iPhone that already exists without this patented technology?¹⁴³

As of today, whether the Infrared Data Patent can be implemented in pre-existing iPhones through a software update is questionable.¹⁴⁴ It is likely that under the patent exhaustion doctrine, consumers who did not buy into the Infrared Data Patent would not be subject to using it.¹⁴⁵ Furthermore, some existing cameras can only pick up infrared waves that reflect off an object, but do not necessarily capture the infrared waves in the way that the iPhone camera requires for the Infrared Data Patent to work.¹⁴⁶ This is especially true for the front-facing iPhone camera, particularly used for the FaceTime feature, because this camera is not equipped to block infrared waves.¹⁴⁷ That being said, the front-facing iPhone camera would essentially be unaffected by the Infrared Data Patent, and in order to

Not Need to Lock Up Your Phone at Her Shows Any Longer, THE WASH. POST (Jun. 30, 2016), archived at <https://perma.cc/L3ZQ-LREN> (informing readers of the extreme measures Alicia Keys and other artists take in order to prevent people from recording at their shows). One could imagine that Apple's Infrared Data Patent will prevent this, saving artists a lot of money. *Id.*; see also Rieffel, *supra* note 88 (arguing that no entity could use the Infrared Data Patent without having to pay "presumably a large sum of money" to Apple, which discourages its adoption by other companies).

¹⁴³ See Rieffel, *supra* note 88 (questioning whether existing iPhones and other cameras will be affected by the Infrared Data Patent).

¹⁴⁴ See Rieffel, *supra* note 88 (discussing Apple's business strategies of cost effectiveness and the possible implications that these strategies could have on implementing the new technology).

¹⁴⁵ See Rieffel, *supra* note 88 (inferring that it is unlikely that the Infrared Data Patent could affect preexisting smartphone and portable camera technology). This is especially true for smartphones and portable cameras that are not licensed by Apple. *Id.*; see also *ExcelStor Technology, Inc. v. Papst Licensing GMBH & Co. KG*, 541 F.3d 1373, 1376 (explaining that patent exhaustion is an affirmative defense and not a cause of action).

¹⁴⁶ See Rieffel, *supra* note 88 (describing the difference between outdated camera technology and the new technology that is required for the Infrared Data Patent). According to some photography experts, it is believed that certain cameras with silicon-based sensors become sensitive when in contact with infrared waves, resulting in images or recordings that are blurry and otherwise not aesthetically pleasing. *Id.*

¹⁴⁷ See Rieffel, *supra* note 88 (articulating that iPhone 6's rear-facing camera could effectively be blocked with infrared technology, but the front camera does not have the five elements lens, the Hybrid IR filter, and the Sapphire crystal lens cover that the rear-facing camera has).

do so would require additional measures.¹⁴⁸ However, with just a simple software update and placing infrared emitters in the right place, Apple could potentially block the front-facing iPhone camera from taking “selfies” and streaming via FaceTime if there were infrared transmitters emitted.¹⁴⁹ Ultimately, due to the high cost of implementing this sort of technology to pre-existing iPhones, it is more likely that the iPhones in use today will not receive the infrared signals.¹⁵⁰ Because there are so many iPhones currently in use that do not have the Infrared Data Patent, and it will likely take some time before the patent is fully implemented, the technology may remain relatively obsolete for a while.¹⁵¹

If and when Apple does implement this new technology, they will also face the risk of hackers and duplications by competitors.¹⁵² It can be extremely easy to intercept and duplicate infrared signals, and if this were to be done at an event that is open to the public, a hacker could begin disabling iPhones at outdoor events, without the iPhone user knowing where the camera disabling is coming from or why.¹⁵³ It is suggested that Apple should include a form of data validation along with the Infrared Data Patent, so that an iPhone user’s

¹⁴⁸ See Rieffel, *supra* note 88 (drawing the conclusion that the front-facing iPhone camera would not be able to intercept infrared signals because the body would block the infrared ways, similar to how a television remote does not work if the infrared signal is blocked).

¹⁴⁹ See Rieffel, *supra* note 88 (rendering a way in which Apple could attempt to implement the Infrared Data Patent into existing iPhone technology, and other cameras thereafter). However, the human body would likely be able to block any of the infrared signals from coming into contact with the front-facing iPhone camera, making it difficult to disable the camera. *Id.* While Apple may try to block photos with infrared signals, an iPhone camera user could still take a “selfie” or use FaceTime. *Id.*

¹⁵⁰ See Rieffel, *supra* note 88 (determining that it is unlikely and not-cost effective for Apple to implement the Infrared Data Patent into pre-existing technology).

¹⁵¹ See Rieffel, *supra* note 88 (understanding that Apple is not implementing the Infrared Data Patent into iPhones currently due to the costs associated with camera design and upgrading current models already in use). Apple is not actively pursuing the Infrared Data Patent technology improvements, and until they do so, the patent is relatively obsolete. *Id.*

¹⁵² See Rieffel, *supra* note 88 (recognizing the risks of implementing the Infrared Data Patent, especially if done by an Apple iOS update). Apple would need to replace the physical cameras to implement Infrared Disabler technology. *Id.*

¹⁵³ See Rieffel, *supra* note 88 (articulating the risks associated with the easy ability for hackers and duplicators to intercept infrared signals used by the Infrared Data Patent).

Internet address, GPS location, or corresponding radio signals can be accessed in order to protect the infrared signals against hackers and duplicators.¹⁵⁴

Additionally, Apple has yet to address is the possibility for iPhone cases to interfere with the Infrared Data Patent.¹⁵⁵ It is imaginable for third-party iPhone case makers to find a way to prevent the infrared signals from getting to at least the rear-facing iPhone camera with relative ease.¹⁵⁶ This could be done by utilizing an infrared “cutting filter” used to block the disabling commands that are necessary in disabling the iPhone camera.¹⁵⁷ Apple fully discloses in the patent description that, “in embodiments where an infrared data includes commands to temporarily disable a device function, a user may not be able to set [‘ON’ or ‘OFF’] configuration options that override the disable commands through infrared data.”¹⁵⁸ To avoid this, it would be wise for Apple to develop a higher level of tampering protection to prevent defiant iPhone users from having an all too easy solution to overcome the Infrared Data Patent.¹⁵⁹

¹⁵⁴ See Rieffel, *supra* note 88 (calling for Apple to include a form of data protection or validation within the Infrared Data Patent in order to protect iPhone users from being hacked). Types of protection could include double-checking a GPS location or receiving corresponding near-field radio signals. *Id.*

¹⁵⁵ See Rieffel, *supra* note 88 (expecting third-party case makers to develop cases that could be used to block the infrared camera technology). A removable phone case may be able to bypass the infrared technology implemented in Apple’s phones. *Id.* These phone cases could be in contravention of the purpose of Apple’s patent, which is to implement cameras that can receive infrared signals and obtain data. *Id.*

¹⁵⁶ See Rieffel, *supra* note 88 (establishing the possibility that a third-party iPhone case developer could prevent the iPhone camera from receiving infrared signals).

¹⁵⁷ See Rieffel, *supra* note 88 (introducing the concept of the “cutting filter” that could be used in blocking the infrared signals from reaching the camera). Cutting filters block infrared wavelengths between 700-850 nanometers, but allow wavelengths between 850-900 nanometers. *Id.* Third-party cases would include an infrared cutting filter to block the wavelengths that could disable a phone. *Id.*

¹⁵⁸ See U.S. Patent, *supra* note 5, at col. 13, l. 8 – 14 (ensuring that iPhone users will not be able to disable the infrared configuration themselves). The patent recognizes that allowing users to disable the Infrared Data Patent feature would “defeat the purpose of providing disable commands through infrared data.” *Id.*

¹⁵⁹ See Rieffel, *supra* note 88 (inquiring as to whether Apple is secretly creating a way that prevents an iPhone case from tampering with infrared signals from reaching the iPhone camera).

B. The First Amendment

As previously mentioned, the First Amendment protects the infringement of free speech because of the content of the speech.¹⁶⁰ As long as content is appropriate, Americans generally have the right to express their feelings in both public and private settings.¹⁶¹ The content artists perform at live concerts is copyrighted, therefore it is illegal for that material to be video-recorded and redistributed.¹⁶² Apple's newly patented technology appeals to live performers by providing them with an opportunity to prevent this from occurring at their shows.¹⁶³ However, the real issue lies with those that have access to infrared signals, and whether they could use them in such a way to protect themselves while infringing on citizens' First Amendment right to film.¹⁶⁴

It is unlikely that the government, particularly the federal government, will have a sound reason to implement the Infrared Data Patent technology.¹⁶⁵ Although those involved with the 2016 filibuster on gun control were able to film the sixteen-hour event, they did so

¹⁶⁰ See *Blackston v. Alabama*, 30 F.3d 117, 120 (11th Cir. 1994) (providing that speech will be regulated when there is a substantial government interest in the content and the content does not unreasonably limit alternative avenues of communication).

¹⁶¹ See *Citizens for Better Env't, v. Schaumburg*, 590 F.2d 220, 226 (7th Cir. 1978) (discussing that individuals have a right to free speech and expression subject to time, place, and manner restrictions). An individual's freedom of speech may be restricted if the speech poses an actual or impending danger to the public. *Id.*

¹⁶² See *Guardian Music*, *supra* note 4 (clarifying that many artists do not want their live performances recorded). Filming of concerts is an annoyance to the musicians because many times artists want to play unreleased songs live, but do not want to deal with the songs appearing on sites such as YouTube before they can release the song on their own. *Id.*

¹⁶³ See *Guardian Music*, *supra* note 4 (supporting artists' desires to not be recorded at live performances by showing that Apple's infrared signals can prevent the attendees' phone recording function).

¹⁶⁴ See *Blackston v. Alabama*, 30 F.3d 117, 120 (11th Cir. 1994) (stating that First Amendment rights may be violated when there are regulations enacted about recording speech based on its content through the use of technology).

¹⁶⁵ See *Blitz*, *supra* note 34, at 33-34 (discussing the fact that continuous electronic and other recording methods are not permitted by the government to use in a free society). See U.S. CONST. amend XIV (legalizing the fundamental rights that are granted to the states and citizens under the United States Constitution).

against the House rules.¹⁶⁶ Typically, cameras and other electronic recording devices are not permitted into the House chambers, especially during a filibuster.¹⁶⁷ This is not a First Amendment violation, for courts have ruled that preventing media broadcasting services and electronics is not a violation of the First Amendment.¹⁶⁸ Even though it was against the House rules, there is an argument that this was an important event in the legislative branch of government, and that the public had a right to know about what was said in that filibuster and who participated.¹⁶⁹

It is very unlikely that the police and other police affiliates will be able to block citizens from recording them with their iPhones equipped with the Infrared Data Patent.¹⁷⁰ So long as the police are performing a public duty, the public has a right to film the situation.¹⁷¹ This is evidenced through police initiated traffic stops, which are considered public duties, and have recently resulted in shootings and deaths of people of color.¹⁷² The public was able to see a first-hand account of some of these shootings because of iPhone camera recordings.¹⁷³ One could imagine that the police would like to take

¹⁶⁶ See Herszenhorn, *supra* note 135 (explaining the House floor rules for the allowance of recording devices in times of filibuster).

¹⁶⁷ See Herszenhorn, *supra* note 135 (noting that the Senators involved in the 2016 filibuster on gun control went against House rules by recording and live-streaming the event to Twitter). Additionally, the incident arose out of instances where C-Span and other major broadcasting networks were not allowed onto the House floor with their recording devices during a filibuster. *Id.*

¹⁶⁸ See *Chandler v. Fla.*, 449 U.S. 560, 569 (1981) (supporting the contention through case law that there is no constitutional right to have testimony recorded and broadcasted, and that the press confers no benefit in the safeguard against any attempt to employ courts as instruments of persecution) (quoting *Nixon v. Warner Communications, Inc.*, 435 U.S. 589 (1978)).

¹⁶⁹ See Dicker, *supra* note 133 (arguing that the live streaming of the 2016 Senate filibuster was important and that the public needed to know of its occurrence).

¹⁷⁰ See *Smith v. City of Cumming*, 212 F.3d 1332, 1333 (11th Cir. 2000) (affirming the American public's right to record in public spaces as a matter of furthering public interest).

¹⁷¹ See *id.* (describing when and why the public has the right to film the police). This is the case regardless of whether or not the officer is wearing a uniform body camera or there is a camera filming on the dashboard of an officer's police vehicle. See Blitz, *supra* note 34, at 61 (articulating the benefits of police body or uniform cameras and dashboard cameras).

¹⁷² See Almasy et al., *supra* note 132 (reporting the shooting of Alton Sterling).

¹⁷³ See Almasy et al., *supra* note 132 (recounting the encounter that took place before the shooting of Alton Sterling by a police officer).

any opportunity that they could to prevent this from continuously occurring, and Apple's Infrared Data Patent may seem like the perfect solution.¹⁷⁴ Although many police departments throughout the country are now requiring officers to wear body cameras, there is still a lot of differing legislation that allow this footage to be protected from the public.¹⁷⁵

C. Patent Law

There are currently over one billion active Apple devices in use throughout the world, most of these being iPhones.¹⁷⁶ Of these iPhones, each and every one of them contain patented material.¹⁷⁷ Upon purchasing an Apple device, including an iPhone, consumers consent and subject themselves to the patented material and its implications.¹⁷⁸ iPhone consumers are not currently subjected to the Infrared Data Patent and its ability to disable the camera when coming into contact with infrared signals, because the patent has not yet been implemented.¹⁷⁹ Implementing the Infrared Data Patent into pre-existing iPhones would be very difficult and expensive for Apple, but even if they did, iPhone owners and users would not be required to implement it.¹⁸⁰ What would most likely happen is that iPhone users when presented with an iOS update would not read the extensive

¹⁷⁴ See Blitz, *supra* note 34, at 61 (reasoning as to why the police or groups that would like to protect the police would not want the police's encounters with the public to be recorded).

¹⁷⁵ See Blackshaw & Matos, *supra* note 51 (listing the different types of legislation surrounding police body cameras in all fifty states).

¹⁷⁶ See Statt, *supra* note 1 (estimating at least one billion Apple devices in circulation throughout the world).

¹⁷⁷ See *iPhone X*, *supra* note 1 (exemplifying the patented material of the physical phone itself that is implemented in Apple's iPhone X). Once the Infrared Data Patent is implemented into the iPhone, the new camera and its technology will be considered patented material as well. *Id.*

¹⁷⁸ See *iPhone X*, *supra* note 1 (listing all of the patented material that is implemented into the latest version of an iPhone).

¹⁷⁹ See *Keurig, Inc. v. Sturm Foods, Inc.*, 732 F.3d 1370, 1373 (Fed. Cir. 2013) (explaining the doctrine of patent exhaustion as the termination of all rights upon authorized sale by the patentee).

¹⁸⁰ See Rieffel, *supra* note 88 (considering the implications of implementing the Infrared Data Patent for Apple).

terms of use and would unknowingly consent to this patent.¹⁸¹ Therefore, the Infrared Data Patent could have some effect on iPhones that are already being used throughout the United States, and the rest of the world.¹⁸²

D. How Do Social Movements Apply to Police Activity?

Many of the major social movements that have sprung up since the rise of the social media industry and hashtag activism can directly be attributed to police activity and the government.¹⁸³ For instance, hashtag activism and police activity lead to the term “#BlackLivesMatter” in the summer of 2013 after a Facebook user used the term to respond to the acquittal of George Zimmerman – the man accused of shooting Trayvon Martin in 2012.¹⁸⁴ Since 2013, #BlackLivesMatter became the slogan tied to the movement.¹⁸⁵ With the creation of the #BlackLivesMatter slogan and the continuing of incidents of police brutality filmed by witnesses using their phones, social media using smartphone footage became the source of how people received their information.¹⁸⁶ Now, social media serves “as a source of live, raw information” that can organize groups of people in a matter of days with just a few thousand “retweets.”¹⁸⁷

¹⁸¹ See *Software License Agreements*, *supra* note 88 (setting for the terms that iPhone users who accept the terms agree to be bound by).

¹⁸² See Rieffel, *supra* note 88 (explaining the difficulty of implementing the Infrared Data Patent into already existing and used iPhones).

¹⁸³ See Banks, *supra* note 115 (introducing the Arab Spring as a major social movement against government censorship); Dicker, *supra* note 133 (providing the 2016 Senate filibuster on gun control as an example of a social movement where the Democrats broadcasted the event on Twitter’s live-feed Periscope).

¹⁸⁴ See Stephen, *supra* note 126 (tracing the #BlackLivesMatter slogan to the Trayvon Martin shooting in 2012). See also CNN Library, *supra* note 131 (laying out the facts of the Trayvon Martin shooting that occurred in Florida in 2012).

¹⁸⁵ See Stephen, *supra* note 126 (tying the #BlackLivesMatter slogan to the entirety of the social movement).

¹⁸⁶ See Stephen, *supra* note 126 (depicting the change in how people gathered information about social movements as the #BlackLivesMatter movement continued). Previously, it was up to the media and other institutions to create a movement, but now people can coordinate them in real time because of social media. *Id.* See also Phillips, *supra* note 102 (alluding that anyone with a smartphone has the potential to participate in social media activism).

¹⁸⁷ See Stephen, *supra* note 126 (proposing that social media can easily gather a group of people behind a social movement).

Four years later, the #BlackLivesMatter movement is still propelled by social media as well as the actions of the police over the course of three years.¹⁸⁸ The term faced heightened use beginning in 2014 with the shooting of Michael Brown in Ferguson, Missouri.¹⁸⁹ This shooting marks the first time that this movement became directly attributed to the police.¹⁹⁰ Continuing into 2016, at least two major police shootings of Black men were caught on camera by bystanders and published on social media for the world to see.¹⁹¹ In these four years, people continuously use social media to broadcast members of the Black community's interactions with the police, while also live streaming their protests against police brutality.¹⁹² With that, it is likely that police forces throughout the country would welcome the opportunity to disable iPhone cameras in order to silence protestors.¹⁹³

One could imagine a scenario in which another incident involving the police will most likely occur again in the United States, particularly after the Infrared Data Patent is implemented into iPhones.¹⁹⁴ If police departments were able to implement infrared signals onto themselves, in a similar way in which they were able to secure uniform cameras or dashboard cameras, they could have the power to disable iPhone cameras from recording them in situations

¹⁸⁸ See Stephen, *supra* note 126 (noting the current strength of the #BlackLivesMatter movement and the events that have propelled the movement over recent years).

¹⁸⁹ See Stephen, *supra* note 126 (recalling the 2014 Michael Brown shooting in Ferguson, Missouri and how it, through social media, furthered the #BlackLivesMatter movement).

¹⁹⁰ See Stephen, *supra* note 126 (identifying the Michael Brown shooting as a "lightning rod" for activism against law enforcement). Stephen uses the Michael Brown shooting to exemplify the volume and force that social media can add to anti-police activism and other social movements. *Id.*

¹⁹¹ See, e.g., Almasy et al., *supra* note 132 (providing live video footage of the Alton Sterling shooting that occurred in July 2016); McLaughlin, *supra* note 132 (showing live video footage of the shooting of Philando Castile in Minnesota on July 6, 2016).

¹⁹² See Stephen, *supra* note 126 (noting that while much of the modern activist scene is decentralized, social media movements like #BlackLivesMatter provide a unified platform for activists).

¹⁹³ See Leetaru, *supra* note 132 (hypothesizing instances where a government would welcome the opportunity to systematically disable smartphone cameras during times of unrest).

¹⁹⁴ See Leetaru, *supra* note 132 (proposing repercussions of the implementation of Apple's Infrared Data Patent).

that the police would not want themselves recorded.¹⁹⁵ This scenario does not have to be one that corresponds with a major social movement, such as #BlackLivesMatter – it could be one of a major, unrelated protest, a drug raid, a stop and frisk, or even a traffic stop.¹⁹⁶ Regardless of why people may wish to film these police encounters, they have a First Amendment right to do so.¹⁹⁷ So long as this encounter is in a public place, citizens have the right to film these interactions, regardless of the scenario.¹⁹⁸ Without this right and without the ability to film these types of encounters, Americans would never have the video footage of these events, aside from the footage that is recorded on uniform cameras or dashboard cameras, or videos taken in police custody.¹⁹⁹ By preventing this ability to film, this creates an infringement on American's First Amendment rights, because those that are protected under the Constitution have a right to film the police performing a public duty in a public space.²⁰⁰

With this, there are scenarios where the police would be completely lawful in implementing the Infrared Data Patent.²⁰¹ If the police are performing a duty in a private space, such as a home, citizens have no right to film that encounter, and doing so could potentially lead to an arrest.²⁰² Contrarily, police officers have the right to film

¹⁹⁵ See Blitz, *supra* note 34, at 60-61 (explaining how police departments utilize uniform cameras); Leetaru, *supra* note 132 (creating a scenario in which the police could utilize the Infrared Data Patent to disable iPhone use).

¹⁹⁶ See Leetaru, *supra* note 132 (providing example of when, where, and why the police may wish to utilize technology like the Infrared Data Patent). Leetaru notes that the government may have an interest in jamming, or selectively disabling recording features in instances that may be especially volatile, sensitive, or controversial. *Id.*

¹⁹⁷ See *Smith v. City of Cumming*, 212 F.3d 1332, 1333 (11th Cir. 2000) (ruling that citizens have a First Amendment right to film the police as a matter of furthering public interest).

¹⁹⁸ See *id.* (noting that the right to film extends to individuals who film public officials operating in a public function).

¹⁹⁹ See Blitz, *supra* note 34, at 28 (identifying the types of encounters that the police uniform cameras are designed to capture).

²⁰⁰ See *Smith*, 212 F.3d at 1333 (differentiating the time and place in which the police may not be filmed).

²⁰¹ *But cf. id.* In *Smith*, the Eleventh Circuit expounded upon a private citizen's First Amendment right to film police activities. *Id.* However, the court ruled against the Smiths, because the Smith's Section 1983 claim did not make a prima facie showing that their constitutional right was deprived. *Id.*

²⁰² See *id.* (narrowing the right to film to police activity on "public property").

citizens in public spaces and interactions.²⁰³ It is important for both the police and citizens to note these distinctions as to not put themselves in a situation that could result in arrest or an infringement on the First Amendment.²⁰⁴ If a citizen felt as though their rights were infringed under a First Amendment claim, they must show how and why his or her conduct should be protected under the Constitution.²⁰⁵ Another way for a plaintiff to prove a First Amendment claim is by showing that said conduct displays a level of harassment that was motivated by the exercise of free speech.²⁰⁶ Yet, courts have noted that a mere threat of the deprivation of rights made by the police is not always a guarantee of recovery for a plaintiff, and courts will instead look to the nature and conduct of the encounter to determine if a First Amendment claim exists.²⁰⁷

V. Conclusion

There are billions of people throughout the world currently using an iPhone. With this small device at the fingertips comes great power and opportunities. The Arab Spring, #BlackLivesMatter, and the 2016 Senate filibuster on gun control are just a few examples of major social movements that are directly attributed to smartphone usage. These movements have all had major impacts not only within the United States, but on a global level as well. Without the ability to record and share videos and photos from a smartphone, it is unlikely that these movements would have come to fruition.

²⁰³ See Blitz, *supra* note 34, at 61 (relaying the right that police officers have to record citizens in public using dashboard or body cams).

²⁰⁴ See Blitz, *supra* note 34, at 27-28 (noting the right to for police to film the public); see also Smith v. City of Cumming, 212 F.3d 1332, 1333 (11th Cir. 2000) (explaining the First Amendment right, subject to reasonable time manner and place restrictions, to record police conduct).

²⁰⁵ See 42 U.S.C.S. § 1983 (establishing an avenue for civil action for the deprivation of constitutional rights, such as a violation of the plaintiff's First Amendment). See also Leibovitz v. Barry, 201 U.S. Dist. LEXIS 128231, at *20 (E.D.N.Y. 2016) (explaining that in order to recover on First Amendment claims, one must demonstrate that his conduct is deserving of protection).

²⁰⁶ See 42 U.S.C.S. § 1983 (providing guarantees of liability to the party injured in an action brought against a judicial officer).

²⁰⁷ See Andree v. Ashland County, 818 F.2d 1306, 1311-12 (7th Cir. 1987) (stating that mere presence of police officers did not constitute a First Amendment violation when they had a lawful right to be present).

With the implementation of Apple's Infrared Data Patent and the police's potential ability to utilize it to stop people from filming with their iPhones, Americans, and people throughout the world could lose the privilege of having video footage and knowledge of these occurrences that have already proven to change the course of the global landscape. This poses the risk for major First Amendment violations. Giving the police or the government an opportunity to disable an iPhone, or any smartphone camera in a public space is a violation of the First Amendment of the United States Constitution. Regardless of social, political, or religious beliefs, there is no doubt that these short snips of video footage are important and meaningful, and it is an infringement of the First Amendment to have the ability to film taken away.