FOURTH AMENDMENT - SEARCH AND SEIZURE - A THERMAL-IMAGING SCAN OF A PRIVATE RESIDENCE FROM A PUBLIC VANTAGE POINT IN ORDER TO DETECT HEAT EMANATING FROM THAT RESIDENCE CONSTITUTES A FOURTH AMENDMENT SEARCH – *Kyllo v. United States,* 533 U.S. 27 (2001).

Robert L. Selvers

I. INTRODUCTION

In *Kyllo v. United States,*[1] the United States Supreme Court reviewed the constitutionality of a thermal-imaging device's scan of a private residence from a public vantage point.[2] Ultimately, the Court held that this type of scan constituted a search under the Fourth Amendment[3] and that, without a warrant, the search was "presumptively unreasonable."[4] In so doing, the Court recognized the effect that the expanding power and intrusiveness of technology has on personal privacy, and refused to permit such technology from infringing upon guaranteed Fourth Amendment rights.[5]

In analyzing the decision of *Kyllo v. United* States, Part II of this note briefly recites the pertinent facts presented in *Kyllo.* Part III summarizes the Supreme Court's Fourth Amendment jurisprudence in the context of technological advancements. In Part IV, the author explains both the majority's and dissent's opinions regarding whether a thermal imaging scan of a private residence from a public vantage point in order to detect heat emanating from that residence, constitutes a Fourth Amendment search requiring a warrant. Finally, Part V ana-

---

[1] 533 U.S. 27 (2001).

[2] *Kyllo,* 533 U.S. at 29.

[3] U.S. CONST. amend IV. The Fourth Amendment guarantees:

> the right of the people to be secure in their persons, houses, papers, and effects, against unreasonable searches and seizures, shall not be violated, and no warrants shall issue, but upon probable cause, supported by oath or affirmation, and particularity describing the place to be searched, and the persons or things to be seized.

Id.

[4] *Kyllo,* 533 U.S. at 40.

[5] *Id.* at 34.

lyzes the majority's decision and concludes that the holding, though commendable for its purported strengthening of individual privacy interests, provides a tenuous and possibly unworkable standard that may in fact undermine an individual's Fourth Amendment rights.

II. STATEMENT OF THE CASE

On January 16, 1992, at approximately 3:30 a.m., Agent William Elliot of the United States Department of the Interior and Sergeant Daniel Haas of the Oregon National Guard parked outside Danny Lee Kyllo's house on a hunch that Kyllo was growing marijuana inside of his residency.[6] As high-intensity heat lamps are required to cultivate marijuana, Sergeant Haas used the Agema Thermovision 210 thermal imager,[7] and performed a thermal-imaging scan of Kyllo's home.[8] In interpreting the thermal-imaging scan, Sergeant Haas noted significant heat loss from several areas of Kyllo's home.[9] Additionally, the thermal-imaging scan revealed that Kyllo's home produced more heat than his adjacent neighbor's.[10] Agent Elliot, upon analyzing this, and other information relating to power and energy use,[11] concluded that Kyllo was using high-intensity heat lamps to cultivate marijuana and procured a search warrant to search Kyllo's home, whereupon he found and seized marijuana, weapons and drug paraphernalia.[12]

As a result of the evidence seized during the search of Kyllo's home, Kyllo was indicted for manufacturing marijuana.[13] When Kyllo challenged the constitutionality of the officer's search, however, the district court denied his motion to

---

[6] United States v. Kyllo, 190 F.3d 1041, 1044 (9th Cir. 1999).

[7] *Id.* The function of the Agema Thermovision 210 thermal imager is to "detect energy radiated from the outside surface of objects, and internal heat that has been transmitted to the outside surface of an object, which may create a differential heat pattern." *Id.*

[8] *Id.*

[9] *Id.*

[10] *Id.*

[11] *Id.* at 1043. In preparing his search warrant affidavit, Officer Haas included police informant testimony and subpoenaed power records of Kyllo's home, which indicated a vastly excessive power usage when compared with estimations of appropriate power usage. *Id.*

[12] *Kyllo*, 190 F.3d at 1044.

[13] *Id.*

suppress.[14] Kyllo entered a conditional guilty plea and appealed the district court's denial of his motion to suppress, challenging, among other things, the warrantless thermal-imaging search conducted by Sergeant Haas.[15]

The Court of Appeals for the Ninth Circuit ordered that there be an evidentiary hearing to determine whether thermal imaging is intrusive and remanded to the district court.[16] On remand, the district court found that thermal imaging only revealed basic, simple images of heat emanating from the home.[17] Moreover, the district court determined that thermal imaging was incapable of physically penetrating objects and therefore was incapable of revealing "intimate details," or activities undertaken within the home.[18] As such, the district court held that thermal imaging was not intrusive and upheld the validity of the search warrant, again denying Kyllo's motion to suppress.[19]

Initially, the court of appeals granted appeal and reversed.[20] This decision was withdrawn.[21] A divided court of appeals subsequently affirmed, with Judge

---

[14] United States v. Kyllo, 809 F. Supp. 787, 793 (D. Or. 1992). The district court, in a particularly cursory fashion, discussed two arguments presented by Kyllo. *Id.* at 789. First, Kyllo alleged that the search warrant was defective as it was procured by the use of deliberately false statements. *Id.* Specifically, Kyllo challenged the warrants inclusion of power usage estimations, claiming that these estimations were deliberately taken out of context. *Id.* Though the district court acknowledged that the information presented within the warrant might have been misleading, nevertheless, the district court concluded that the information was not presented as to be deliberately false. *Id.* at 791. Kyllo's second contention focused on the Fourth Amendment implications of the thermal imaging scan. *Id.* at 789. Kyllo argued that officers were required to obtain a separate and distinct search warrant, pursuant to the Fourth Amendment, in order to use the thermal imaging device to scan his private residence. *Id.* at 792. The district court quickly dismissed this constitutional question, holding that the use of a thermal imaging device does not disclose intimate details of the home, was not an intrusion into the home and, therefore, does not require a search warrant to be effectuated. *Id.*

[15] *Kyllo*, 190 F.3d at 1044.

[16] United States v. Kyllo, 37 F.3d 526, 531 (9th Cir. 1994).

[17] United States v. Kyllo, 1996 U.S. Dist. LEXIS 3864, *4 (D. Or. 1996).

[18] *Id.* at *5.

[19] *Id.*

[20] Kyllo v. United States, 533 U.S. at 30-31 (citing United States v. Kyllo, 140 F.3d. 1249 (9th Cir. 1998)).

[21] United States v. Kyllo, 184 F.3d 1059 (9th Cir. 1999). The appellate court's reason for withdrawing the prior opinion was merely two sentences: "The opinion filed April 7, 1998 and appearing at 140 F.3d 1249 (9th Cir. 1998) is withdrawn. The panel, being unanimously of the view that the issues are well framed by the briefs filed to date, will proceed to issue an

Noonan filing a dissenting opinion.[22] In reviewing the district court's opinion, the court narrowly tailored the Fourth Amendment thermal imaging debate, focusing on whether heat emissions should be accorded a privacy interest, rather than recognizing the privacy interest already accorded the home.[23] In so doing, the court first concluded that Kyllo did not manifest a subjective expectation of privacy in the heat emissions, as he did not try to conceal these emissions from emanating from his home.[24] Furthermore, the court ruled that no privacy interest in heat emissions existed, as society was not prepared to recognize this privacy interest as "objectively reasonable."[25] In this context, the court noted that "activities within a residence are not protected from outside, non-intrusive, government observation, simply because they are within the home."[26] Thus, the court of appeals held that the warrantless use of a thermal imaging device to detect heat emissions radiating from a home was not prohibited by the Fourth Amendment.[27] The United States Supreme Court granted certiorari and reversed the decision of the Court of Appeals for the Ninth Circuit.[28]

III. PRIOR CASE LAW

The United States Supreme Court's Fourth Amendment jurisprudence dates back as early as the 19th century.[29] The Court's penultimate explanation of the

---

opinion without further argument." *Id.*

[22] United States v. Kyllo, 190 F.3d 1041 (9th Cir. 1999). In dissent, Judge Noonan focused on the Fourth Amendment's explicit protection of the home. *Id.* at 1048. Specifically, Judge Noonan considered any technologically enhanced observation that revealed information otherwise unobtainable through ordinary visual surveillance in contravention of the Fourth Amendment's expressed protection of an individual's private residence. *Id.* at 1049.

[23] *Id.* at 1046.

[24] *Id.*

[25] *Id.* at 1047.

[26] *Id.* at 1046-47.

[27] *Id.* at 1047.

[28] United States v. Kyllo, 533 U.S. 27 (2001).

[29] For a brief discussion of the limited nature of nineteenth century Fourth Amendment Supreme Court case law, *see* Mark E. Newcomb, Note, *The Drug-Free Federal Workplace: a Question of Reasonableness*, 29 WM. & MARY L. REV. 215, 218 n.13 (1987).

reasonableness requirement of the Fourth Amendment, though, was not articulated until 1967 in *Katz v. United States*.[30] In *Katz*, the government attached an electronic listening device to a public pay telephone booth and was therefore able to listen to and record an individual's telephone conversation made from the confines of this public booth.[31] In analyzing whether the recordation of this conversation constituted a warrantless search in violation of the Fourth Amendment, the Court acknowledged that no general right to privacy existed.[32] In conjunction with this idea, the Court recognized that the Fourth Amendment's protections necessarily extended to individuals, not places.[33] Therefore, the majority reasoned that an individual's public telephone conversation, whereby the individual pays the telephone toll and shuts the door to the booth, is constitutionally protected against warrantless eavesdropping.[34] Additionally, the Court refused to acknowledge the idea that a physical penetration was required in order to effectuate a search, emphasizing again the Fourth Amendment's protection of people, not places.[35] Because the government did not secure judicial approval for this surveillance and no prior judicial restraints existed to narrow the search, the majority deemed the government's actions unconstitutional.[36]

In a brief analysis of the Court's decision, Justice Harlan concurred.[37] Justice Harlan believed that the majority tailored and, therefore, limited the Fourth Amendment analysis in *Katz* to the facts at issue before the Court.[38] Accord-

---

[30] 389 U.S. 347 (1967).

[31] *Id.* at 348.

[32] *Id.* at 350.

[33] *Id.*

[34] *Id.* at 352.

[35] *Id.* at 353.

[36] *Katz*, 389 U.S. at 357.

[37] *Id.* at 360 (Harlan, J., concurring).

[38] *Id.* Justice Harlan broke down the majority's opinion into three succinct parts. *Id.* First, Justice Harlan read the majority's opinion to stand for the conclusion that individuals were entitled to a reasonable expectation of privacy within a phone booth. *Id.* Next, Justice Harlan believed the majority opinion held that certain electronic and physical intrusions into private areas might in fact violate the Fourth Amendment. *Id.* Finally, Justice Harlan noted the majority's mere reaffirmation of the Courts long standing precedent that the warrantless governmental intrusions into constitutionally protected areas are presumptively unreasonable under the Fourth Amendment. *Id.* at 361. (Harlan, J., concurring).

ingly, Justice Harlan expanded the constructs of the Fourth Amendment analysis as he saw it and explained when a search occurred in more tangible and concrete terms.[39] Justice Harlan reasoned that a search warrant would be required, pursuant to the Fourth Amendment, when two distinct factors, one subjective and one objective, were present.[40] First, Justice Harlan stated that "a person [must subjectively] exhibit an actual expectation of privacy [in that which is being searched]." Second, Justice Harlan noted "that expectation [must be] one that society is prepared to recognize as [objectively] 'reasonable'."[41] The dispositive fact in *Katz,* Justice Harlan noted, was that the individual in the public telephone booth shut the door behind him, transforming an otherwise public place into one that is private.[42]As such, Justice Harlan concurred with the majority's decision and concluded that the warrantless search effectuated in *Katz* was unconstitutional.[43] Subsequently, the Court has adopted Justice Harlan's two-prong analysis of the reasonableness requirement of the Fourth Amendment.

The Court continued to define the parameters of a Fourth Amendment search in the context of electronic surveillance and, in *Smith v. Maryland,*[44] considered whether the use of a pen register[45] constituted such a search.[46] Adhering to Justice Harlan's definition of a search set forth in his concurrence in *Katz*, the Court answered the question in the negative.[47]

In *Smith*, the police requested, and the telephone company obliged, in the installation and use of a pen register in order to determine the telephone numbers dialed by an individual suspected of robbery and making threatening telephone

---

[39] *Id.*

[40] *Id.* at 361 (Harlan, J., concurring).

[41] *Id.*

[42] *Katz,* 389 U.S. at 361 (Harlan, J., concurring).

[43] *Id.*

[44] 442 U.S. 735 (1979).

[45] *Smith*, 442 U.S. at 736. "A pen register is a mechanical device that records the numbers dialed on a telephone by monitoring the electrical impulses caused when the dial on the telephone is released. It does not overhear oral communications and does not indicate whether calls are actually completed." *Id.* at 736 n.1 (citing United States v. New York Tel. Co., 434 U.S. 159, 161 n.1 (1977)).

[46] *Id.*

[47] *Id.* at 745-46.

calls.[48] The police did not try to obtain a warrant for this surveillance.[49] Based upon the information revealed by the use of the pen register, as well as other credible evidence, the police obtained a search warrant for the individual's home, which eventually lead to an arrest.[50] Subsequently, the individual challenged the police use of the pen register as a warrantless search in violation of the Fourth Amendment.[51]

Justice Blackmun, writing for a majority of the Court, focused the Court's analysis primarily on both prongs of Justice Harlan's test, specifically, whether the individual possessed a legitimate expectation of privacy in the dialed telephone numbers and whether society would recognize this privacy interest as reasonable.[52] The Court found no reasonable or legitimate expectation of privacy in dialed telephone numbers.[53] Justice Blackmun postulated that because all dialed telephone numbers must pass through the telephone company in order to be completed, these numbers were public information.[54] According to the Court, this fact rendered immaterial whether the telephone call was made from public property or a private residence.[55] Additionally, the Court reasoned that even if a privacy interest existed, as the information obtained had already been conveyed to the public society, was not prepared to recognize this interest as reasonable.[56]

The Court next addressed the advancements made in electronic surveillance in *United States v. Knotts*,[57] and again focused on the distinction between public and private information.[58] In *Knotts*, the police attached a beeper[59] to a drum

---

[48] *Id.* at 737. The pen register at issue was installed at the telephone company's central offices. *Id.*

[49] *Id.*

[50] *Smith*, 442 U.S. at 737.

[51] *Id.*

[52] *Id.* at 739.

[53] *Id.*

[54] *Id.* at 743.

[55] *Id.*

[56] *Smith*, 442 U.S. at 743-44.

[57] 460 U.S. 276 (1983).

[58] *Knotts*, 460 U.S. at 281-82.

containing chloroform in order to locate a suspected drug laboratory.[60] Eventually, the suspect being monitored by the police received the drum.[61] The police followed the suspect, keeping sight of the vehicle through visual surveillance from public roads as well as monitoring the location of the vehicle as provided by the beeper's signal.[62] The police lost sight of the suspect, but, the monitoring of the beeper provided the police accurate information as to the suspect's location.[63] For three more days, the police continued their surveillance of the suspect and the drum of chloroform.[64] The drum, the police noted, at all times remained outside the suspect's home.[65] Eventually, this surveillance led to the issuance of a search warrant of the premises as well as the arrest and conviction of the suspect.[66] In turn Knotts, the defendant, challenged the constitutionality of the police's warrantless beeper monitoring.[67]

The majority maintained that the two prong analysis set forth in the *Katz* concurrence was germane to the Court's decision but, as in *Smith*, the Court refused to hold that electronic surveillance that provides police with otherwise public information should be constitutionally protected.[68] The Court concentrated on two particular facts. First, the Court noted that the initial visual surveillance, aided by the beeper, took place on public streets and highways.[69] In addition, the Court rationalized that the monitoring of the beeper in front of the suspect's cabin revealed only that the drum was outside.[70] In both instances, the Court

---

[59] *Id.* at 277. In the context of police surveillance, a beeper merely relays signals to the police that enable the officers to monitor the whereabouts and location of the beeper. *Id.*

[60] *Id.* at 278.

[61] *Id.*

[62] *Id.*

[63] *Knotts*, 460 U.S at 278.

[64] *Id.* at 279.

[65] *Id.*

[66] *Id.*

[67] *Id.*

[68] *Id.* at 285.

[69] *Knotts*, 460 U.S. at 281.

[70] *Id.* at 284.

found that, as no intrusive details were obtained, no legitimate expectation of privacy existed for information obtained electronically that was available through public, visual surveillance.[71]

The very next term, a factually analogous situation presented itself before the Court in *United States v. Karo*.[72] In *Karo,* however, the issue, as stated by the Court, was "whether monitoring of a beeper falls within the ambit of the Fourth Amendment when *it reveals information that could not have been obtained through visual surveillance.*"[73] Although the facts in *Karo* were nearly on point to those of *Knotts*, the Court noticed one subtle distinction. The Court determined that the predominant fact relied upon by the police was that the drum of chemicals was inside the home, which unlike in *Knotts*, was not capable of being discovered publicly.[74] As the Court noted, this elevated the otherwise permissible monitoring technology of the beeper from a public visual surveillance to that of an unconstitutional warrantless Fourth Amendment search of a private residence.[75]

Although the *Karo* decision appeared to limit the ability of the government to use electronic surveillance to detect criminal activity, in a string of subsequent decisions, the Court quickly retreated from this position. In both *Dow Chemial Co. v. United States*[76] and *California v. Ciraolo,*[77] the Court affirmed the idea that information obtained by public, visual surveillance was not protected by the Fourth Amendment.[78]

---

[71] *Id.* at 285.

[72] 468 U.S. 705 (1984). In *Karo*, police officers attached a beeper to the contraband in order to monitor both the contraband and the suspect's movements. *Id.* at 708. Using the beeper as well as visual surveillance the police followed the suspect to his home. *Id.* Eventually, the beeper indicated to the police that the contraband was inside the suspect's home. *Id.*

[73] *Karo*, 468 U.S. at 707 (emphasis added).

[74] *Id.* at 714.

[75] *Id.* at 716. "Indiscriminate monitoring of property that has been withdrawn from public view would present far too serious a threat to privacy interests in the home to escape entirely some sort of Fourth Amendment oversight." *Id.*

[76] 476 U.S. 227 (1986).

[77] 476 U.S. 207 (1986). *Dow Chemical* and *Ciraolo* were both decided on May 19, 1986. Both decisions were five to four, with no Justice deciding differently in either decision. Dow Chemical Co. v. United States, 476 U.S. 227 (1986); California v. Ciraolo, 476 U.S. 207 (1986).

[78] *Dow Chemical*, 476 U.S. at 238. According to the *Dow Chemical* Court, "the mere

The alleged search in both *Dow Chemical* and *Ciraolo* involved the commission of an aerial observation taken approximately 1000 feet above ground.[79] In *Dow Chemical*, the area photographed was a chemical plant, while in *Ciraolo*, the area photographed was a private residence.[80] In each case, the observation and photograph revealed information not available to the public from the ground.[81] In each case, the Court acknowledged that the individuals being photographed manifested an expectation of privacy in their property through the construction of fences,[82] and, through otherwise vigilant security.[83] In each case, however, the Court determined that public, visual observation, enhanced by lawful, public, aerial observations, does not constitute a search, and, therefore, does not implicate the Fourth Amendment.[84]

Important in both *Dow Chemical* and *Ciraolo* was that no physical encroachment of the observed area occurred.[85] As the *Ciraolo* Court noted "the observations. . .in this case took place within public navigable airspace, *in a physically nonintrusive manner.*[86] Additionally, the Court considered the information obtained "knowingly exposed to the public."[87] Accordingly, the Court in both cases refused to characterize the images revealed by the photographs as intimate details, therefore, as the Court saw it, there were no constitutional problems.[88]

---

fact that human vision is enhanced somewhat . . . does not give rise to constitutional problems." *Id.*

[79] *Id.* at 232; *Ciraolo,* 476 U.S. at 209.

[80] *Dow Chemical*, 476 U.S. at 238. As the Court recognized in *Dow Chemical*, an individual's private residence is afforded more constitutional protection than that of a place of business. *Id.*

[81] *Id.* at 232; *Ciraolo,* 476 U.S. at 209.

[82] *Dow Chemical*, 476 U.S. at 232; *Ciraolo,* 476 U.S. at 209.

[83] *Dow Chemical*, 476 U.S. at 232. The Court noted that Dow's "elaborate security" successfully barred any "ground level public views" of the complex. *Id.*

[84] *Dow Chemical*, 476 U.S. at 239; *Ciraolo,* 476 U.S. at 215.

[85] *Dow Chemical*, 476 U.S. at 237; *Ciraolo,* 476 U.S. at 213.

[86] *Ciraolo*, 476 U.S. at 213 (emphasis added).

[87] *Id.*

[88] *Dow Chemical*, 476 U.S. at 239; *Ciraolo,* 476 U.S. at 215. In *Florida v. Riley,* the

IV. *KYLLO V. UNITED STATES*: A THERMAL-IMAGING SCAN OF A PRIVATE RESIDENCE FROM A PUBLIC VANTAGE POINT IN ORDER TO DETECT HEAT EMINATING FROM THAT RESIDENCE CONSTITUTES A FOURTH AMENDMENT SEARCH

A. MAJORITY OPINION

In *Kyllo*,[89] the Court determined the constitutionality of a warrantless thermal-imaging scan of a private residence.[90] Justice Scalia, joined by Justices' Souter, Thomas, Ginsburg, and Breyer, wrote the majority opinion for the Court and analyzed this question in three distinct yet important contexts.[91] First, in support of the decision, Justice Scalia provided a detailed recitation of the controlling case law.[92] Second, Justice Scalia acknowledged the impact technological advancements have had on the Court's Fourth Amendment jurisprudence.[93] Third, Justice Scalia addressed both the government's and the dissent's arguments and ultimately concluded that a thermal-imaging scan of a private residence, although done from a public area, constituted a search that required a warrant under the Fourth Amendment.[94]

Initially, Justice Scalia provided the core of the Fourth Amendment's protection.[95] The bedrock principle, the Court noted, was that a warrantless search of a home is presumptively unreasonable and, with few exceptions, unconstitutional.[96] Coupled with this idea, Justice Scalia recognized that the linchpin of

---

Court addressed an interrelated question, whether aerial observations revealing information from the interior of a partially covered greenhouse located on private property recorded from a helicopter constitutes a search under the Fourth Amendment, requiring a warrant. 488 U.S. 445, 447-48 (1989). The Court found *California v. Ciraolo* controlling and answered the question presented in the negative. *Id.*

[89] 533 U.S. 27 (2001).

[90] *Id.* at 29.

[91] *Id.*

[92] *Id.* at 31-35.

[93] *Id.* at 33-34.

[94] *Id.* at 35-41.

[95] *Kyllo*, 533 U.S. at 31.

[96] *Id.*

this principle rests on the determination that a search has occurred; however, the Justice was quick to point out that a warrantless visual observation into an individual's home has never been deemed unlawful. In this regard, the Court posited, "visual observation is no 'search' at all."[97] Thus, in order to conclude whether a search occurred in this instance, the Court reiterated and applied the principles espoused in *Katz*:

> A Fourth Amendment search does *not* occur – unless 'the individual manifested a subjective expectation of privacy in the object of the challenged search,' and 'society [is] willing to recognize that expectation as reasonable.'[98]

After setting forth the factual circumstances of *Katz*,[99] the majority recited Justice Harlan's concurrence, that a "Fourth Amendment search occurs when the government violates a subjective expectation of privacy that society recognizes as reasonable."[100] In fact, however, Justice Scalia recognized the negative inference this proposition has held throughout the Court's jurisprudence and rephrased the Court's key inquiry.[101] By doing so, the Court made clear that unless the individual has taken affirmative steps to indicate their subjective expectation of privacy and society is willing to accept this privacy interest as reasonable, no search has occurred, even where the home is involved.[102]

Before presenting the holding, Justice Scalia acknowledged technology's affect on Fourth Amendment rights.[103] Accordingly, the Justice saw the issue confronting the Court in a broad context, openly wondering how advancements in technology could and would necessarily diminish our guaranteed privacy

---

[97] *Id.*

[98] *Id.* at 33 (quoting *Ciraolo*, 476 U.S. at 211).

[99] *Id.* In *Katz*, the government attached an electronic listening device to a public pay telephone booth. 389 U.S. 347, 348 (1967). The police, therefore, were able to listen to and record the private telephone conversation made from the confines of this public booth. 389 U.S. at 348. *See supra* notes 30-43 and accompanying text.

[100] *Id.*

[101] *Kyllo*, 533 U.S. at 32.

[102] *Id.* at 33-34.

[103] *Id.*.

rights.[104] With this fear in mind the Court upheld the fundamental degree of privacy the Fourth Amendment guaranteed, holding that a search has occurred where a thermal-imaging device secures information about an individuals' home, that would be otherwise unobtainable without an actual, physical intrusion.[105]

The Court next addressed both the government's argument and Justice Steven's argument made in dissent, that the thermal-imaging scan was not a Fourth Amendment search as it only detected observations made from "off-the-wall" as opposed to "through-the-wall surveillance."[106] In rejecting this distinction, the Court noted several intrusive and invasive technological advancements that could merely provide, as the government and the dissent suggested, "off-the-wall" observations; the Court considered these technological advancements too invasive and constituting a search.[107] In negating the dissent's argument that "off-the-wall" observations merely provided inferences, not information, and therefore, did not constitute a search, the Court stridently articulated that even "through-the wall" surveillance required inferences (i.e., analysis) to make the information significant.[108]

The Court continued to rebuke the government's argument and refused to hold that because thermal imaging did not "detect private activities occurring in private areas," it was constitutional.[109] In fact, the Justice looked to the jurisprudence of the Fourth Amendment and noted that the Court has never been concerned with the quality or quantity of the information obtained from a search but

---

[104] *Id.* at 34. As Justice Scalia stated, "the question we confront today is what limits there are upon this power of technology to shrink the realm of guaranteed privacy." *Id.*

[105] *Id.*

[106] *Id.*

[107] *Kyllo,* 533 U.S. at 35. According to Justice Scalia, an example of "off-the-wall" technology, as characterized by both the government and the dissent, would be "a powerful directional microphone [that] picks up only sound emanating from a house." *Id.* Unless a warrant is obtained prior to its use, the Court noted that *Katz* would be controlling and the use of this "off-the-wall" technology would violate the Fourth Amendment. *Id.*

[108] *Id.* at 36. In so recognizing, Justice Scalia cited *Karo* for support. *Id.* (citing United States v. Karo, 468 U.S. 705 (1984)). Justice Scalia reasoned that in *Karo*, "the police 'inferred' from the activation of a beeper that a certain can of ether was in the home." *Id.* (citing *Karo,* 468 U.S. at 727). In that instance, according to Justice Scalia, the beeper provided through-the-wall surveillance that required police interpretation in order to become relevant. *Id.* at 37.

[109] *Id.*

rather the area where the intrusion of the search occurred.[110] In this regard, Justice Scalia restated the privacy interest implicit within the home, observing that all activities within the home were both private and intimate.[111] The Court reasoned that merely "limiting the prohibition of thermal imaging to intimate details" was impractical, unworkable and unwise."[112] The majority noted several situations where thermal imaging could and would reveal personal details.[113] These details, Justice Scalia explained, depending on interpretation, may, or may not be considered intimate.[114] As such, the Court refused to adopt the government's test for determining whether the technology employed during a search is actually a search in and of itself.[115]

Next, the Court attacked the dissent's bright-line approach, which stated that "whether the technology offers the functional equivalent of actual presence in the area being searched" determines whether a search took place.[116] Justice Scalia acknowledged that this approach appeared similar to the Court's holding, but, after probing the dissent's reasoning behind this standard, the Court concluded that the dissent's primary focus was the quality of the information obtained.[117] Therefore, according to the majority, this standard was equally as unacceptable as the government's.[118]

Having rejected both bright line approaches espoused by the government and the dissent, Justice Scalia relied on the jurisprudence of the Fourth Amendment to formulate the Court's holding: a thermal imaging scan of a private residence from a public vantage point in order to detect heat emanating from that residence

---

[110] *Id.*

[111] *Id.* Justice Scalia noted that no bright-line could be established with regards to determining what constituted an intimate detail within the home. *Id.* Accordingly, the Court noted that to adopt such a standard would be impractical and unworkable. *Id.*

[112] *Id.* at 38.

[113] *Kyllo,* 533 U.S. at 38. According to the Court, these personal details include: (i) "at what hour each night the lady of the house takes her daily sauna and bath, and (ii) "that someone [merely] left a closet light on." *Id.*

[114] *Id.* at 38-39.

[115] *Id.* at 39.

[116] *Id.*

[117] *Id.*

[118] *Id.*

constitutes a search where that device used to employ the scan is not in the general public use.[119] Accordingly, the Court reversed the decision of the Court of Appeals for the Ninth Circuit and remanded the case to the District Court in order to determine whether sufficient evidence was presented in the original warrant, excluding the thermal imaging scan, that would make the search of Kyllo's residence constitutional.[120]

B. JUSTICE STEVENS' DISSENT

Justice Stevens, joined by Chief Justice Rehnquist, Justice O'Connor, and Justice Kennedy, filed a dissenting opinion, polarizing the constitutional debate.[121] According to Justice Stevens, a significant difference exists between surveillance that can retrieve information only obtainable with access to private areas and that surveillance which merely obtains information available to the public and requires further inferences and interpretations to be valuable.[122] The dissent gave credence to the latter view and believed that the allegedly unconstitutional search before the court merely constituted police interpretations of publicly obtained information.[123]

Justice Stevens addressed the Court's holding, understanding the majority's decision to have expanded the protection of the Fourth Amendment further than its jurisprudence allows.[124] The dissent acknowledged that the Fourth Amendment's protection clearly extended to those warrantless intrusions inside an individual's home.[125] Justice Stevens explained, however, that these Fourth Amendment protections do not encompass searches that yield knowingly exposed public information.[126] As the dissent observed, the thermal imaging at issue in this case revealed only heat emissions, not private details.[127] Therefore,

---

[119] *Kyllo,* 533 U.S. at 40.

[120] *Id.* at 40.

[121] *Id.* at 41 (Stevens, J., dissenting).

[122] *Id.*

[123] *Id.*

[124] *Id.* at 42.

[125] *Kyllo,* 533 U.S. at 42 (Stevens, J., dissenting).

[126] *Id.*

[127] *Id.* at 42-43 (Stevens, J., dissenting).

the dissent concluded that the information obtained was merely an "off-the wall" observation, public and not constitutionally protected.[128]

Justice Stevens continued to criticize the Court, and was unable to fathom how information provided to the public, outside of an individual's home, was accorded constitutional protection.[129] According to the dissent, the gathering of this information, specifically where heat was emitted from Kyllo's residence, required further analysis to become relevant.[130] Where this inferential step is necessary, the dissent concluded, the official activity could never constitute a search in violation of the Fourth Amendment.[131] Moreover, Justice Stevens, relying on dicta in *California v Greenwood*,[132] posited that constitutionally protecting heat emissions was tantamount to constitutionally requiring government officials to willfully avert their observations away from possibly incriminating evidence.[133]

Justice Stevens next dissected each aspect of the Court's holding, beginning with the Court's "general public use" criteria.[134] The dissent surmised that this requirement negated any bright line approach the Court wished to establish as it necessarily mandated a debate as to when, and by how much use, certain technology could be considered in general public use.[135] Of specific concern, Justice Stevens maintained that, contrary to the Court's intention, once a surveillance technology was in the general public use, the privacy interest of the individual the Court wished to protect would be whittled away as it would no longer be constitutionally prohibited.[136]

---

[128] *Id.* at 43 (Stevens, J., dissenting). In so deciding, Justice Stevens aptly contrasted "off-the-wall" thermal imaging, which obtains information the public could detect, with more intrusive "through-the-wall" technology, primarily that of an X-Ray which is capable of physically penetrating an individual's premises. *Id.*

[129] *Id.*

[130] *Id.* at 44 (Stevens, J., dissenting).

[131] *Kyllo*, 533 U.S. at 44 (Stevens, J., dissenting).

[132] 486 U.S. 35 (1988). The Court in *Greenwood* explained, "the police cannot be reasonably expected to avert their eyes from evidence of criminal activity that could have been observed by any member of the public." *Id.* at 41.

[133] *Kyllo*, 533 U.S. at 45 (Stevens, J., dissenting).

[134] *Id.* at 46-47 (Stevens, J., dissenting).

[135] *Id.* at 47 (Stevens, J., dissenting).

[136] *Id.*

The dissent continued its attack of the majority, focusing on the overly broad and encompassing category of "sense-enhancing technology" that would now be ensnared by the majority's rule.[137] In mocking this idea, Justice Stevens analogized "sense-enhancing technology" with that of a dog sniffing for narcotics.[138] Although dog sniffs were previously deemed constitutional, as that search was limited in both the content it revealed and the manner by which it revealed it, the dissent reasoned that under the majority's formulation, this constitutional "sense enhancing" device would now be unconstitutional.[139]

Next, Justice Stevens focused on the aspect of the Court's holding that prohibited detection of "any information regarding the interior of the home."[140] Again, according to Justice Stevens, this aspect of the rule is both too broad and too narrow.[141] The dissent believed that this prohibition was too broad, as it prohibited the use of all information obtained outside of an individual's home, including those observations that could be made with the naked eye.[142] Additionally, Justice Stevens proclaimed this criterion to be too narrow, as it only prohibited the use of sense-enhancing technology on the home and no other constitutionally protected area.[143]

Having countered the effectiveness of the Court's holding, the dissent concluded by negating the Court's two primary justifications for the rule the majority espoused.[144] First, Justice Stevens countered the notion that the holding in *Katz* mandated the Court's decision, distinguishing and limiting *Katz* from the issue at hand.[145] Specifically, Justice Stevens noted a difference between

> the general and well-settled expectation that strangers will not have direct access to the contents of private communications, on the one hand, and the

---

[137] *Id.*

[138] *Id.*

[139] *Kyllo,* 533 U.S. at 47-48 (Stevens, J., dissenting).

[140] *Id.* at 48 (Stevens, J., dissenting).

[141] *Id.*

[142] *Id.*

[143] *Id.* at 48-49 (Stevens, J., dissenting).

[144] *Id.*

[145] *Kyllo,* 533 U.S. at 49 (Stevens, J., dissenting).

> rather theoretical expectation that an occasional homeowner would even care if anybody noticed the relative amounts of heat emanating from the walls of his house, on the other.[146]

Second, the dissent took specific issue with the Court's belief that thermal imaging possessed "through-the-wall surveillance" capabilities, strenuously arguing that this dubious contention was inaccurate.[147] Accordingly, Justice Stevens refused to accord heat emissions detected by thermal-imaging constitutional protection.[148]

V. CONCLUSION

Under the rubric of the Fourth Amendment's jurisprudence protecting an individual's private residence from unwarranted governmental intrusion has always been of paramount importance.[149] In *Kyllo,* the Court stressed that "obtaining by sense enhancing technology any information regarding the interior of the home that could not otherwise have been obtained without physical 'intrusion into a constitutionally protected area' constitutes a search – at least where . . . the technology in question is not in general public use."[150] Although the Supreme Court attempted to uphold the Constitutional protections afforded the home, the *Kyllo* Court's "general public use" language deviates from Constitutional precedence and in the process clouds the future sanctity of the home.

Throughout the majority opinion, Justice Scalia gave credence to the Constitutional proposition that any physical invasion of the home is too much.[151] As an interrelated concept, Justice Scalia correctly noted that all details that could be obtained from within side the home are intimate and Constitutionally protected from the prying eyes of government officials.[152] In so concluding, Justice Scalia recognized that to hold otherwise would impermissibly require the Courts to

---

[146] *Id.* at 50 (Stevens, J., dissenting).

[147] *Id.* at 50-51 (Stevens, J., dissenting).

[148] *Id.* at 51 (Stevens, J., dissenting).

[149] Payton v. New York, 445 U.S. 573, 586 (1980) ("Searches and seizures inside a home without a warrant are presumptively unreasonable.").

[150] *Kyllo,* 533 U.S. at 34 (quoting Silverman v. U.S, 365 U.S. 505, 512 (1961)).

[151] *Id.* at 34-35.

[152] *Id.* at 37-38.

provide a list of what activities within the home are "intimate" and what are not.[153] These thoughts, the core of Justice Scalia's majority opinion, flatly contradict the idea that the "general public use" of the questioned search enhancing technology should be important. To the contrary, it is apparent that the Supreme Court has misinterpreted its own case law and included for Constitutional review that which was previously unnecessary.

By including the "general public use" language, Justice Scalia purported to rely on the precedent established in *California v. Ciraolo*.[154] As the distinction between *Ciraolo* and *Kyllo* are apparent, so is the folly of the Court. The information obtained by the aerial observation in *Ciraolo* was information available to the public as it was displayed outside the individual's private residence. Suffice to say, had the individual not erected an artificial barrier the public would have been capable of observing the same details retained by the police's photograph.[155] The use of police overflight, although ordinarily not used as search enhancing technology, is recognized by the general public as "routine" and does not constitute a search.[156] Of primary importance to the *Ciraolo* Court, however, was the constitutional principle that visual observation does not constitute an intrusion and does not implicate the Fourth Amendment.[157] As the police overflight in *Ciraolo* did not physically intrude upon the individual's home, only a visual observation had taken place.[158]

In *Kyllo,* Justice Scalia recognized and accepted the fact that any physical intrusion into the home was too much. As the thermal imaging scan of Kyllo's residence garnered information otherwise unobtainable without a physical invasion of the premises, the thermal imaging scan should have been unequivocally deemed a physical intrusion for Fourth Amendment purposes. Unfortunately, as indicated above, Justice Scalia misinterpreted *Ciraolo* thereby requiring the in-

---

[153] *Id.* at 38.

[154] 476 U.S. 207 (1986).

[155] *Id.*

[156] *Id.* at 215. Though aerial overflight may be considered "routine" within the American psyche, clearly the American public does not actually fly either planes or helicopters with any degree of regularity. According to the *Kyllo* holding, therefore, aerial overflight should not be considered within the "general public use" and any otherwise private information obtained from this warrantless visual observation should be considered repugnant to the Fourth Amendment.

[157] *Id.*

[158] *Id.*

clusion of the "general public use" language. This addendum to the Court's holding unnecessarily expands the government's opportunity to search inside an individual's home.

As Justice Stevens accurately noted in dissent, when thermal imaging becomes routine within American society, police officers may utilize this technology to obtain information inside an individual's private residence and may do so without first obtaining a warrant.[159] This idea runs contrary to the absolute bar against physical intrusion into the home already constructed by the Fourth Amendment. Moreover, as no definition exists as to what constitutes "general public use," the American public, whom once were secure in the confines of their homes, are now left to differing judicial whims. Depending on the jurisdiction of one's residence will ultimately determine whether a certain technological advancement is within the "general public use."

Justice Scalia in *Kyllo* would have been constitutionally justified in erecting a more fortified boundary against intrusion into the home. Accordingly, the more appropriate holding in *Kyllo* would have required that any information gathered via a technologically enhanced search obtaining any details otherwise not privy to public visual surveillance, should be considered a physical intrusion of an individual's home in contravention of the Fourth Amendment. Although the Constitutional line previously drawn around the home was bright and clear, sadly with the addition of the "general public use" requirement, that is no longer true.

[159] *Kyllo*, 533 U.S. at 47 (Stevens, J., dissenting).