DANNY LEE KYLLO, PETITIONER *v.* UNITED STATES

[June 11, 2001]

Justice Scalia delivered the opinion of the Court.

This case presents the question whether the use of a thermal-imaging device aimed at a private home from a public street to detect relative amounts of heat within the home constitutes a "search" within the meaning of the Fourth Amendment.

I

In 1991 Agent William Elliott of the United States Department of the Interior came to suspect that marijuana was being grown in the home belonging to petitioner Danny Kyllo, part of a triplex on Rhododendron Drive in Florence, Oregon. Indoor marijuana growth typically requires high-intensity lamps. In order to determine whether an amount of heat was emanating from petitioner's home consistent with the use of such lamps, at 3:20 a.m. on January 16, 1992, Agent Elliott and Dan Haas used an Agema Thermovision 210 thermal imager to scan the triplex. Thermal imagers detect infrared radiation, which virtually all objects emit but which is not visible to the naked eye. The imager converts radiation into images based on relative warmth–black is cool, white is hot, shades of gray connote relative differences; in that respect, it operates somewhat like a video camera showing heat images. The scan of Kyllo's home took only a few minutes and was performed from the passenger seat of Agent Elliott's vehicle across the street from the front of the house and also from the street in back of the house. The scan showed that the roof over the garage and a side wall of petitioner's home were relatively hot compared to the rest of the home and substantially warmer than neighboring homes in the triplex. Agent Elliott concluded that petitioner was using halide lights to grow marijuana in his house, which indeed he was. Based on tips from informants, utility bills, and the thermal imaging, a Federal Magistrate Judge issued a warrant authorizing a search of petitioner's home, and the agents found an indoor growing operation involving more than 100 plants. Petitioner was indicted on one count of manufacturing marijuana, in violation of 21 U.S.C. § 841(a)(1)….

II

The Fourth Amendment provides that "[t]he right of the people to be secure in their persons, houses, papers, and effects, against unreasonable searches and seizures, shall not be violated." "At the very core" of the Fourth Amendment "stands the right of a man to retreat into his own home and there be free from unreasonable governmental intrusion." *Silverman* v. *United States*, 365 U.S. 505, 511 (1961). With few exceptions, the question whether a warrantless search of a home is reasonable and hence constitutional must be answered no. See *Illinois* v. *Rodriguez*, 497 U.S. 177, 181 (1990); *Payton* v. *New York*, 445 U.S. 573, 586 (1980).

On the other hand, the antecedent question of whether or not a Fourth Amendment "search" has occurred is not so simple under our precedent. The permissibility of ordinary visual surveillance of a home used to be clear because, well into the 20th century, our Fourth Amendment jurisprudence was tied to common-law trespass…. As we observed in *California* v. *Ciraolo*, 476 U.S. 207, 213

(1986), "[t]he Fourth Amendment protection of the home has never been extended to require law enforcement officers to shield their eyes when passing by a home on public thoroughfares…."

In assessing when a search is not a search, we have (held) a Fourth Amendment search does *not* occur–even when the explicitly protected location of a *house* is concerned–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." *Ciraolo*, *supra*, at 211. We have applied this test in holding that it is not a search for the police to use a pen register[1] at the phone company to determine what numbers were dialed in a private home, *Smith* v. *Maryland*, 442 U.S. 735, 743—744 (1979), and we have applied the test on two different occasions in holding that aerial surveillance of private homes and surrounding areas does not constitute a search, *Ciraolo*, *supra*; *Florida* v. *Riley*, 488 U.S. 445 (1989).

The present case involves officers on a public street engaged in more than naked-eye surveillance of a home. We have previously reserved judgment as to how much technological enhancement of ordinary perception from such a vantage point, if any, is too much. While we upheld enhanced aerial photography of an industrial complex in *Dow Chemical*, we noted that we found "it important that this is *not* an area immediately adjacent to a private home, where privacy expectations are most heightened," 476 U.S., at 237, n. 4 (emphasis in original).

III

It would be foolish to contend that the degree of privacy secured to citizens by the Fourth Amendment has been entirely unaffected by the advance of technology. For example, as the cases discussed above make clear, the technology enabling human flight has exposed to public view (and hence, we have said, to official observation) uncovered portions of the house and its curtilage that once were private. See *Ciraolo*, *supra*, at 215. The question we confront today is what limits there are upon this power of technology to shrink the realm of guaranteed privacy….

We think 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," *Silverman*, 365 U.S., at 512, constitutes a search–at least where (as here) the technology in question is not in general public use. This assures preservation of that degree of privacy against government that existed when the Fourth Amendment was adopted. On the basis of this criterion, the information obtained by the thermal imager in this case was the product of a search….2

We have said that the Fourth Amendment draws "a firm line at the entrance to the house," *Payton*, 445 U.S., at 590. That line, we think, must be not only firm but also bright–which requires clear specification of those methods of surveillance that require a warrant. While it is certainly possible to conclude from the videotape of the thermal imaging that occurred in this case that no "significant" compromise of the homeowner's privacy has occurred, we must take the long view, from the original meaning of the Fourth Amendment forward.

"The Fourth Amendment is to be construed in the light of what was deemed an unreasonable search and seizure when it was adopted, and in a manner which will conserve public interests as well as the interests and rights of individual citizens." *Carroll* v. *United States*, 267 U.S. 132, 149 (1925).

---

1 A pen register is an electronic device that records all numbers called from a particular telephone line.

Where, as here, the Government uses a device that is not in general public use, to explore details of the home that would previously have been unknowable without physical intrusion, the surveillance is a “search” and is presumptively unreasonable without a warrant….

The judgment of the Court of Appeals is reversed; the case is remanded for further proceedings consistent with this opinion.

It is so ordered.