

No. _____

IN THE SUPREME COURT OF THE UNITED STATES

FRANKIE OVIES,
Petitioner,

v.

UNITED STATES OF AMERICA,
Respondent.

PETITION FOR A WRIT OF CERTIORARI TO THE UNITED
STATES COURT OF APPEALS FOR THE NINTH CIRCUIT

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QUESTION PRESENTED

1. Whether using Cellebrite technology to download forensic digital evidence from a cell phone requires specialized or technical knowledge so that the evidence must be presented in a federal trial by a qualified expert, as the Fourth and Sixth Circuits have held, or whether it may be presented as lay testimony and not subject to strict reliability standards, as the Second and Ninth Circuits have held?

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Petitioner, Frankie Ovies, respectfully prays for a writ of certiorari to issue to review the judgment of the United States Court of Appeals for the Ninth Circuit.

OPINION BELOW

On August 16, 2019, the Ninth Circuit affirmed Petitioner's conviction, finding in part that the district court did not need to satisfy Federal Rule of Evidence 702 before it admitted testimony and evidence about forensic data obtained from a cell phone using Cellebrite technology. *See* App. A; *United States v. Ovies*, --- F. App'x --, 2019 WL 3854257 (9th Cir. 2019) (unpublished).

JURISDICTION

Petitioner was convicted of violating of 8 U.S.C. § 1324, for aiding and abetting the transportation of undocumented aliens, in the United States District Court for the Southern District of California. The United States Court of Appeals for the Ninth Circuit reviewed his conviction under 28 U.S.C. § 1291, and affirmed his conviction on August 16, 2019. This Court has jurisdiction to review the judgment under 28 U.S.C. § 1254(1).

STATUTORY PROVISION

Federal Rule of Evidence 702 provides:

A witness who is qualified as an expert by knowledge, skill, experience, training, or education may testify in the form of an opinion or otherwise if:

- (a) the expert's scientific, technical, or other specialized knowledge will help the trier of fact to understand the evidence or to determine a fact in issue;
- (b) the testimony is based on sufficient facts or data;
- (c) the testimony is the product of reliable principles and methods; and
- (d) the expert has reliably applied the principles and methods to the facts of the case.

INTRODUCTION

This Petition presents the Court with an opportunity to ensure that federal law keeps up with the advent of new technology. Petitioner was convicted of aiding and abetting alien smuggling; at trial, his defense was that he was unaware that he was helping someone smuggle an alien and was only helping someone get to Los Angeles for a job. The government relied on text messages it extracted from mobile phones using a technology called Cellebrite to argue that Petitioner knew exactly what he was doing.

But despite the fact that Cellebrite is a complex technology that requires specialized training, the lower courts do not uniformly require Cellebrite evidence and testimony to pass the rigorous evidentiary standards in Federal Rule of Evidence 702. The Fourth and Sixth Circuits believe Cellebrite implicates specialized and technical knowledge, and so can only be presented by an expert to ensure evidentiary reliability. But the Second and Ninth Circuits allow Cellebrite evidence to be presented under more lax evidentiary standards by a lay witness.

The Court should grant the Writ to determine whether Cellebrite evidence is subject to Rule 702 and must be presented by a qualified expert, given the ubiquity of cell phones in our lives and that prosecutors rely on cell phones with increasing frequency. Granting the Writ will ensure that federal law keeps up with modern technology and allow the Court to address the rules that apply in prosecutions involving new technologies like Cellebrite.

STATEMENT OF THE CASE

I. At trial, the prosecution introduced forensic data downloaded from a cell phone using Cellebrite technology.

Petitioner was charged with aiding and abetting the transportation of illegal aliens. He was accused of guiding another man, Joel Madrigal—who was transporting an undocumented individual who had paid \$7,000 to be smuggled into the United States—to Los Angeles. Madrigal admitted that he was knowingly smuggling an undocumented immigrant, and testified that after he asked a friend for directions to Los Angeles, Petitioner met him at a McDonald's in San Diego and directed Madrigal to follow him north on the freeway, towards Los Angeles. Madrigal noted that he had never met Petitioner before, had not called him for help getting to Los Angeles, and never told Petitioner that the person in his car was undocumented.

Petitioner's defense was that he did not know Madrigal, did not know the passenger was undocumented, and had been contacted by a friend who asked him only to help someone make his way to Los Angeles. In other words, he was not aiding and abetting alien smuggling, and was not working in concert with Madrigal. Given this defense, the question for the jury was whether Petitioner knew that Madrigal was involved in alien smuggling, and whether Petitioner knew he was assisting in smuggling when he directed Madrigal to follow him north.

Before trial, a Border Patrol agent had downloaded text messages between Madrigal and Petitioner from their cell phones. The agent had used a Cellebrite device to download the text messages, and the government used these messages at

trial to argue that Petitioner knew that Madrigal was involved in alien smuggling and was knowingly assisting him.

A Cellebrite device connects to a mobile device or phone and extracts data, translating the data's code into a readable format and capturing the images on the mobile device. Because each mobile device has different and proprietary technology, Cellebrite must create different devices and software that are specific to each particular mobile device. Because of this, Cellebrite cannot necessarily be used on all types of mobile devices, either because Cellebrite does not have software that supports a specific device, or because certain devices have quirks that prevent Cellebrite from working properly.

Here, the Border Patrol agent used a Cellebrite device to extract and download forensic data from Madrigal's and Petitioner's cell phones. Petitioner objected before trial that using a Cellebrite device, and testifying about the technology and the results, requires specialized and technical knowledge and therefore must satisfy Federal Rule of Evidence 702. The district court disagreed, ruling that using Cellebrite was "a pretty pedestrian exercise" that did not require any particular expertise, so it was not expert testimony within Rule 702.

Given this ruling, when the agent testified at trial, the government did not tender him as an expert, the court never made any of Rule 702's threshold findings, and Petitioner was not permitted to voir dire the agent about his experience and training.

Nevertheless, at trial it became clear that the agent lacked a basic understanding of how Cellebrite worked, and had never received any of the recommended training before using Cellebrite in Petitioner’s case. The agent believed that using Cellebrite was “very simple,” and did not require any training to use. He had only witnessed someone else use Cellebrite for “four hours,” and had “probably 10 hours of hands on experience” with Cellebrite before he started using it to obtain evidence for criminal cases.

On cross-examination, the agent made several statements that undercut his previous claim that Cellebrite was a “very simple” technology. Cellebrite itself offered trainings for how to use its technology, though the agent had never attended any, and Cellebrite made several different types of devices—each capable of extracting, or downloading, different types of data. Cellebrite could perform different types of data extractions, and the agent had performed a “logical” extraction, which did not recover any deleted data. Though the agent had previously testified that using Cellebrite was akin to “plugging your phone into iTunes and creating a backup,” he admitted that because “technology is fallible,” when using Cellebrite he wasn’t always able to download all of the data he wanted from a phone. For example, for one of Petitioner’s phones, the agent was unable to download any deleted data. Even though he worked with an expert who “does these all the time,” he was unable to extract deleted data even after “[trying] for days.” Because of this, the agent was unable to extract any data that his first Cellebrite download had “missed.”

But despite these indications that Cellebrite is not a simple “plug and play”

technology that creates a mirror image backup of the data on the phone, the district court allowed the Border Patrol agent to testify about using a Cellebrite device on the cell phones and introduced the data he extracted from them. He testified that based on the phone log report Cellebrite created, there were several calls between Petitioner and Madrigal on the day of the offense, and that Petitioner had called Madrigal first. He also testified about text messages between the two. The texts began on the date of the smuggling incident, and were mostly of the two sending their location to each other so they could meet up. There was a text from Petitioner saying, “OK and passengers it’s you and another person/relative right.” The last text exchanged between Madrigal and Petitioner was Petitioner’s message that said, “Where are you buddy,” which the government argued Petitioner had sent after Madrigal was stopped on the freeway by Border Patrol and Petitioner lost sight of him. The agent also testified that he did not find these particular text messages on Petitioner’s phone and believed the text messages with Madrigal had been deleted, which the government argued showed consciousness of guilt.

II. The Ninth Circuit affirmed Petitioner’s conviction, finding that the Cellebrite forensic data was not expert testimony subject to Rule 702.

The Ninth Circuit affirmed Petitioner’s conviction. It held that the district court did not abuse its discretion in allowing the Border Patrol agent to testify about Cellebrite without qualifying him as an expert witness under Rule 702. *See* App. A at 4. The agent “testified only about the steps he took using the Cellebrite program; he did not opine as to the reliability or any other aspect of the Cellebrite technology

and his testimony was not based on technical or specialized knowledge.” It also held that Petitioner was not prejudiced by the agent’s testimony because Madrigal had testified about his text messages and phone calls. *Id.*

REASONS FOR GRANTING THE PETITION

- I. The Court should resolve the circuit split regarding whether the introduction of digital forensic data—which is used in prosecutions with increasing frequency given the ubiquity of cell phones—should be subject to the expert evidentiary standards of Federal Rule of Evidence 702.**

As this Court well knows, cell phones and mobile devices are now so widely used that not having one is the exception. *See, e.g., Carpenter v. United States*, 138 S. Ct. 2206, 2211 (2018) (noting that there are more cell phone accounts than people in the United States); *Riley v. California*, 573 U.S. 373, 395 (2014) (noting that over 90% of American adults own a cell phone and that cell phones contain detailed records of every aspect of life). And with the proliferation of cell phone use has come the technology to access their information. Cellebrite technology is a relatively new technology that allows law enforcement to extract a phone’s data, and then use it in a criminal prosecution. The question presented in this Petition is what rules apply when data obtained using Cellebrite is used at trial.

- II. The use of digital forensic data in federal trials is a complex and important issue that the lower courts grapple with every day.**

Forensic data examination—like downloading data from a cellphone using hardware and software not used by the general public—requires technical and specialized knowledge that the average lay person does not possess. This is

demonstrated by the large number of forensic tools available to examiners. For instance, the Department of Commerce maintains a forensic tool database that sorts forensic tools by capability; it contains over 35 different forensic capabilities, from “hash analysis,” “file carving,” “Steganalysis,” “drone forensics,” and “email parsing.” National Institute of Standards and Technology, Department of Commerce, *Computer Forensics Tool Catalog*, available at <https://toolcatalog.nist.gov> (last accessed Oct. 30, 2019). Even looking just at Cellebrite, the company that manufactured the software and hardware used to obtain forensic data in Petitioner’s case, Cellebrite makes at least six hardware devices to account for all of the different idiosyncrasies involved in forensic data examination—different types of data, different methods of extraction, and different types of devices, to name a few. *See, e.g.*, Cellebrite, *Sales Inquiry Form*, available at <https://www.cellebrite.com/en/sales-inquiry> (last accessed Oct. 30, 2019) (listing at least six types of mobile Cellebrite hardware devices).

Accurately and reliably extracting (or downloading) digital data from a device, analyzing the data, verifying the results of the extraction, and then explaining the entire process to a jury requires technical knowledge based on training and experience, and is knowledge well beyond what the average lay person or juror possesses. Those familiar with digital forensic data are well aware of the technical and specialized knowledge it requires. The Scientific Working Group on Digital Evidence (SWGDE), which is an industry group comprised of federal crime laboratory directors from, for example, the ATF, DEA, and FBI, recommends that examiners

processing digital evidence be certified, undergo a minimum of 40 hours of training each year, and that examiners' proficiency in the discipline be tested annually "to ensure consistency and quality." *See* Scientific Working Group on Digital Evidence, *Minimum Requirements for Quality Assurance in the Processing of Digital and Multimedia Evidence*, available at www.swgde.org/documents, at 5-7 (last accessed Oct. 30, 2019). Recognizing the need to continually provide forensic data examiners with the specialized knowledge the discipline requires, SWGDE publishes a number of training documents and guidelines—aimed at the digital forensic community—to update examiners on guidelines and best practices for everything from collecting digital evidence to authenticating digital audio. *Id.*

Cellebrite itself recognizes that examiners using Cellebrite will need to testify as experts, and offers training to help lawyers "qualify [their] expert witnesses" to testify about digital forensics. Cellebrite, *Training, Legal Professional Track*, available at <https://www.cellebrite.com/en/training-tracks/legal-professional-track> (last accessed Oct. 30, 2019). To ensure that digital forensic examiners accurately use its technology, Cellebrite recommends that data examiners undergo a training and certification process that lasts at least six days. Cellebrite, *Training Tracks, Core Mobile Forensics Track*, available at <https://www.cellebrite.com/en/training-tracks/core-mobile-forensic-track> (last accessed Oct. 30, 2019).

And forensic data examination does not just require technical or specialized knowledge beyond what the average juror possesses. It also requires specialized hardware devices—devices that are so expensive that they are not accessible to the

general public. Purchasing a device to download forensic data from a mobile device, for instance, can cost thousands of dollars. *See, e.g., Forensic Store*, available at <https://forensicstore.com/product-category/cell-phone-analysis> (last accessed Oct. 30, 2019) (listing various hardware devices available for purchase such as an Eclipse 3 Pro SLR Kit for \$3,490, a Cellphone Investigation Bundle for \$7,013, an MPE nFIELD for \$1,995, and a Paraben E3: DS for \$2,995). Simply put, to accurately extract digital forensic data from devices requires a level of technical and specialized knowledge—as well as specialized technology—that is well beyond the average person’s capabilities, and requires knowledge and expertise to understand and master.

Moreover, this extracted forensic data is relevant in virtually any type of criminal case, given the broad range of information we now keep on our phones—from everywhere we’ve traveled, to bank and health information, to text messages with our spouses. More and more criminal prosecutions hinge on forensic data evidence since mobile devices and computers are rich with detailed evidence of every move we make. Prosecutors themselves acknowledge that because most people possess data-rich smart phones, cell phone data is very “versatile” evidence for criminal prosecutions. *See* Kristin Hamann and Rebecca Rader Brown, *Secure in Our Convictions: Using New Evidence to Strengthen Prosecution*, 50-Feb. Prosecutor 15 (2018). This means that federal trial courts must confront the important question presented in this Petition: which rules govern the admission of digital forensic data at trial, and whether the data is subject to the heightened reliability standards of

Federal Rule of Evidence 702, which ensures that evidence is reliable and that the expert presenting the evidence has a “reliable basis in the knowledge and expertise of his discipline.” *Daubert v. Merrell Dow Pharm., Inc.*, 509 U.S. 579, 591, 594-95 (1993).

III. The lower courts are deeply divided about whether testimony about digital forensic examinations is expert testimony that falls under Rule 702.

Rule 702 governs the admission of testimony that requires “technical, or other specialized knowledge [that] will help the trier of fact to understand the evidence or to determine a fact in issue,” and requires a witness to testify based upon his or her “knowledge, skill, experience, training, or education ...” *See* Rule 702. But the Circuits are split on whether this Rule applies to Cellebrite testimony and evidence.

The Fourth and Sixth Circuits have held that testimony regarding digital forensic examinations, and specifically those using Cellebrite, implicate Rule 702 and must satisfy its strict evidentiary standards. These circuits reason that using and testifying about Cellebrite requires specialized and technical knowledge about computers and forensic software that the average layperson does not possess.

For instance, the Sixth Circuit has recognized that interpreting a Cellebrite report for the jury requires the witness “to apply knowledge and familiarity with computers and the particular forensic software well beyond that of the average layperson.” *United States v. Ganier*, 468 F.3d 920, 926 (6th Cir. 2006). It held that the testimony fell under Rule 702 because it required “scientific, technical, or other

specialized knowledge.” *Id.* The court compared Cellebrite to specialized medical tests run by doctors like paternity blood tests, and noted that the doctors testifying about the results would be subject to Rule 702’s requirements for expert testimony. *Id.*

Similarly, the Fourth Circuit found that Rule 702 governed the admission of a forensic data examiner’s testimony about her extraction and translation of the data at issue, using software similar to Cellebrite. *United States v. Yu*, 411 F. App’x. 559, 566–67 (4th Cir. 2010) (unpublished). It noted that the examiner explained “the technique forensic examiners typically use to extract data,” that they use forensic software to remove data, and that examiners “translate the raw information into a viewable format.” *Id.* at 566. After reviewing this testimony, the Fourth Circuit concluded that “the process of forensic data extraction requires ‘some specialized knowledge or skill or education that is not in possession of the jurors.’” *Id.* at 566-67 (quoting *Ganier*, 468 F.3d at 926).

It reached the same conclusion in a later case, where a computer forensic examiner from the police department used computer software to “make a ‘mirror’ image of [the defendant’s] computer in order to examine its contents.” *United States v. Stanley*, 533 F. App’x 325, 327 (4th Cir. 2013) (unpublished). The examination revealed that the defendant had installed a file-sharing program to download and share child pornography, and the examiner’s testimony about this was held to constitute expert testimony under Rule 702. *Id.* In reaching this conclusion, the

Fourth Circuit noted that “many courts have noted that the process of forensic data extraction requires specialized knowledge or skill conducive to expert testimony.” *Id.*

But the Sixth and Fourth Circuits’ holdings conflict with those of the Ninth and Second Circuits. In Petitioner’s case, for instance, the Ninth Circuit concluded that the agent’s testimony about his forensic examination and extraction of the cell phones’ data was not “based on technical or specialized knowledge” falling under Rule 702. *See App. A at 4.* In its view, the agent only testified about “the steps he took using the Cellebrite program,” but did not offer expert testimony because he did not “opine as to the reliability or any other aspect of the Cellebrite technology.” *See id.*

This is in line with the Second Circuit’s view. In *United States v. Marsh*, the court concluded that a detective’s use of Cellebrite to extract text messages and other data from a cellphone did not fall under Rule 702. 568 F. App’x 15, *17 (2d Cir. 2014) (unpublished). It reasoned that the detective testified only about his investigation and how he used Cellebrite to retrieve the phone’s data, and did not “purport to render an opinion based on the application of specialized knowledge to a particular set of facts; nor did his testimony turn on or require a technical understanding of the programming or internal mechanics of the technology.” *Id.*

Thus, the Ninth Circuit’s conclusion in Petitioner’s case deepens the existing circuit split over whether forensic data extraction requires specialized and technical knowledge, and whether this testimony is therefore expert testimony falling under Rule 702. This Court should grant the Petition to address whether this type of testimony and evidence implicates Rule 702, as the Fourth and Sixth Circuits have

found, or whether it is not expert testimony, as held by the Second and Ninth Circuits. Granting the petition will ensure uniformity across the federal courts, as well as ensure that only reliable evidence is introduced at trial.

IV. This case presents an ideal vehicle to resolve the issue since the issue is preserved and would affect the outcome in Petitioner’s case.

Petitioner’s case presents an ideal vehicle to address whether evidence obtained using Cellebrite and other similar technologies that can extract forensic data is subject to the rigorous evidentiary standards in Rule 702.

The issue was preserved and ruled on in district court, and squarely addressed by the Ninth Circuit. Moreover, remanding for the district court to apply Rule 702 to the agent’s testimony would make a difference in the outcome of trial, despite the panel’s finding that admission of the testimony was harmless. The government relied on the text messages as detailed in the agent’s Cellebrite report to argue at closing that Petitioner knew he was aiding Madrigal’s alien smuggling. The prosecutor focused on the specific verbiage Petitioner used in the texts, claiming it was the way someone would talk if he was smuggling aliens, and argued that Petitioner was using code words to refer to the undocumented immigrant in Madrigal’s car. These texts, the prosecutor argued, showed that Petitioner “knew exactly what he was doing and exactly what he was driving down to San Diego to do.”

In this way, the government relied on the Cellebrite report and the agent’s testimony to rebut Petitioner’s defense that he did not know Madrigal was engaged in alien smuggling, specifically referred to the report during its closing, and argued

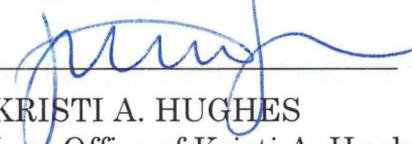
that the report was evidence of Petitioner's knowledge—the only issue for the jury in the case. Remanding to the district court with instructions to apply Rule 702 to the agent's Cellebrite testimony would affect the outcome because, after applying the correct rule to the testimony, the Ninth Circuit could then vacate Petitioner's conviction after correctly analyzing the impact of the testimony in Petitioner's case.

CONCLUSION

The Ninth Circuit further entrenched a circuit split in holding that the agent did not offer expert testimony falling within Rule 702. This Court should grant the writ to address this important question of federal law and ensure that the Federal Rules of Evidence are uniformly applied.

Date: November 13, 2019

Respectfully submitted,



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