

IN THE UNITED STATES DISTRICT COURT  
FOR THE DISTRICT OF NEW JERSEY

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EDWARD W. FELTEN; BEDE LIU;  
SCOTT A. CRAVER; MIN WU;  
DAN S. WALLACH; BEN  
SWARTZLANDER; ADAM  
STUBBLEFIELD; RICHARD DREWS  
DEAN; and USENIX ASSOCIATION,  
a Delaware non-profit non-stock  
corporation,

Plaintiffs,

v.

Hon. Garret E. Brown, Jr.  
Case No. CV-01-2669 (GEB)  
Civil Action

RECORDING INDUSTRY ASSOCIATION  
OF AMERICA, INC.; SECURE DIGITAL  
MUSIC INITIATIVE FOUNDATION;  
VERANCE CORPORATION; JOHN  
ASHCROFT, in his official capacity as  
ATTORNEY GENERAL OF THE  
UNITED STATES; DOES 1 through  
4, inclusive,

Defendants.

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**SUPPLEMENTAL DECLARATION OF EDWARD W. FELTEN**

## **I. Introduction**

1. I am one of the Plaintiffs in this action. I previously filed a Declaration in this action; that Declaration summarizes my background and experience. This Declaration is intended to supplement my previous Declaration, which I incorporate here in full by reference.

2. This Declaration will discuss two topics: the article I am currently writing for Scientific American magazine, and the increased importance of research on information hiding, in light of the recent terrorist attacks.

## **II. The Scientific American Article**

3. My previous Declaration mentioned an article that I am preparing for Scientific American magazine. In the time since that Declaration, my plans for the article have become more clear, though of course my ability to write and publish the article depends on my legal situation.

4. The article will describe in general the role and nature of information hiding, and some applications of information hiding, including audio watermarking. It will recount the chronology of the SDMI challenge and our research. After describing how we defeated the SDMI technologies, the article will conclude by returning to fundamentals and explaining why watermarking appears doomed to failure.

5. The article will delve into detail in a few places, in “boxes” that are set apart from the main flow of the text. As in any scientific writing for a general audience, it is important to touch on the technical details in this way in order to prevent the article from being superficial, and in order to give the readers a taste for the concrete details of the technology. One such box will describe the details of the Verance technology (which was called “Technology A” in the SDMI challenge); I chose that technology

because it is based on echoes, a concept that nonspecialists already understand, and because it presents other interesting details.

6. Another box will describe the structure of the overall technological system that SDMI was apparently trying to design, a structure that my colleagues and I inferred from the nature of the challenge technologies. This box will also explain a number of weaknesses in the overall design, by suggesting how a would-be pirate would be able to attack it.

7. Based on my experience in dealing with the Private Defendants, the contents of the boxes seem to me to be the kind of things to which they would likely object.

8. As I stated in my previous Declaration, I will not give the Defendants a pre-publication copy of my article.

9. I will be unable to either submit or publish the Scientific American article unless the attendant risk of a DMCA suit or prosecution against me is removed, either by a ruling of the Court or by suitable assurances from the Defendants.

### **III. Impact of the Terrorist Attacks**

10. The terrorist attacks on September 11 have led to many changes in national priorities. This has been felt in the research community, as research topics and agendas that appear useful in the struggle against terrorism have gained prominence.

11. It has been widely suggested that the members of terrorist networks communicate via messages hidden in multimedia content. For example, in the White House press briefing by Press Secretary Ari Fleischer on October 10, 2001, Mr. Fleischer discussed the Administration's concerns about the possibility of secret messages encoded in a videotape released by Osama bin Laden:

Q Can you tell us about the discussions the White House has had with the networks about their coverage?

MR. FLEISCHER: Yes. Dr. Condoleezza Rice, the National Security Advisor, this morning called a group of network executives to raise their awareness about national security concerns of airing pre-recorded, pre-taped messages from Osama bin Laden that could be a signal to terrorists to incite attacks.

It was a very collegial conversation. At best, Osama bin Laden's message is propaganda, calling on people to kill Americans. At worst, he could be issuing orders to his followers to initiate such attacks. Dr. Rice asked the networks to exercise judgment about how these pre-recorded, pre-taped messages will air. She stressed that she was making a request, and that editorial decisions can only be made by the media.

Q And what was their response?

Q Ari, do you have a sense for what it is, whether this is propaganda, or do you have suspicions that they may, in fact, be trying to convey something?

MR. FLEISCHER: Well, people are analyzing that now. There are no easy conclusions to reach, but I think it's rather plain to have these thoughts, these suspicions about what it could include. That's why, as Dr. Rice indicated, at best, it's pre-taped, pre-recorded propaganda, but propaganda of a most insidious nature. At worst, it could be actually signaling to his operatives.

(Transcript at <http://www.whitehouse.gov/news/releases/2001/10/20011010-9.html>)

12. To translate Mr. Fleischer's discussion into the terminology of this case, the terrorists may be using information hiding technology, and the United States wants to circumvent that technology. This helps to illustrate the harm that could arise from the suppression of knowledge about how to circumvent such technologies.

13. On September 26, the Defense Advanced Research Projects Agency (DARPA), which acts as the research arm of the U.S. Department of Defense, asked me to join its Information Science and Technology Advisory Board. I accepted their invitation. Though they did not state a specific reason for inviting me, it seems

reasonable to infer from the timing of the invitation that Department of Defense's interest in my areas of research has increased in light of the terrorist attacks.

I declare under penalty of perjury that the foregoing is true and correct. Executed on October 22, 2001, in Washington, DC.

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Edward W. Felten