

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

RØDE MICROPHONES, LLC AND
FREEDMAN ELECTRONICS PTY LTD,
Petitioners

v.

ZAXCOM, INC.,
Patent Owner

Case IPR2025-00230
U.S. Patent 7,711,443

DECLARATION OF WILLIAM SAROKIN

Exhibit 2127

1. I, William Sarokin, have been asked by counsel for Patent Owner Zaxcom, Inc. ("Zaxcom") to provide this declaration to describe my experience with the Zaxcom products that embody Zaxcom's U.S. Patent 7,711,443 ("the '443 Patent") including, without limitation, the Zaxcom TRX900 series of products. I am above the age of eighteen and capable of making this declaration. All statements set forth herein are true and correct and based on my personal knowledge.

2. I've been a motion picture and television sound mixer since 1978. I've been nominated for an Oscar, an Emmy, a CAS award, an Italian Oscar (the Davide de Donatello awards) and numerous others. My credits include American Gangster, Mr Robot, Inside Man, Sex and the City, Salt, Sicario and over one hundred twenty (120) other movies and television shows. I'm at the top of the game, and I have been for many years.

3. I can say without the slightest qualification that the work of Zaxcom as described and claimed in the '443 Patent has revolutionized the motion picture industry.

4. I first started using Zaxcom gear in 1999 when I purchased one of the first (if not the first) Cameo Digital Field Mixers. While I was at the factory to pick up the product, Zaxcom's founder, Mr. Glenn Sanders, proudly showed me a spindly mass of circuit boards and alligator clips and said he was working on a

fully digital wireless microphone. Shortly thereafter, I received a copy of a monthly technical journal called Recording Engineer and Producer. The cover story was about digital radio microphones. The story called them the “Holy Grail” of radio mics but went on to say that they were impossible. They required more bandwidth than the FCC allowed, needed too much power, would be much too large and transmission range would be too short to be practical. I recall faxing the article to Mr. Sanders.

5. About a year later, I was mixing a film in New York called “Brown Sugar” shortly after 9/11/01. Mr. Sanders called me and asked if he could visit the set. We were filming a “walk and talk” along the Brooklyn Heights Promenade with Queen Latifah and Sanaa Lathan. Mr. Sanders showed up with a small radio receiver and tiny transmitter. It was his first-generation digital radio microphone. I immediately hooked it into my audio system, and we put the transmitter on Queen Latifah and filmed the scene. To my knowledge, that was the first use of a digital radio in the field during filming of a motion picture. It worked beautifully. I purchased two of the first-generation units, but Mr. Sanders was already speaking of the next generation units that would be fully remote controllable and have internal recording capability with SMPTE time code as a sync reference to tie it together with all the other radio microphones and the main remote mixer/recorder. This was a revolutionary concept. No other manufacturers had anything remotely

similar. To give you an idea of how revolutionary Mr. Sanders's gear was, I first put the digital radios to use on Brown Sugar in November 2001 when everyone was saying digital radio microphones ("mics") were impossible. Zaxcom would have no competition for almost 8 years. It was 2009 before SONY engineers were able to figure out the algorithms pioneered by Zaxcom. By the time Sony came out with their first digital radio, Zaxcom was already on its 3rd generation.

6. By 2005, my sound cart was fully digital, incorporating Zaxcom digital recorders, mixing boards, and twelve (12) digital radio mics. Just as I was starting production on Ridley Scott's "American Gangster," Zaxcom upped the game. Just before production started, Mr. Sanders announced his third-generation units. I purchased twelve (12) TRX 900 transmitters and these included a mini SD card slot for locally recording audio and a built in remote control receiver. For the first time, radio mic transmitters were now transceivers. Not only could they transmit audio, they could also receive time code sync signals and remote control commands. Zaxcom combined this incredible capability with a built in digital recorder for backup recording, making his digital transmitters full synchronous recording systems. This capability solved the major limitation of radio mics. In most cases their transmission power is limited by the Federal Communication Commission ("FCC") to fifty (50) MW. That's tiny. For reference, a walkie talkie puts out about five (5) Watts. Prior to Zaxcom's invention, radio mics had a very

limited range. Depending on what else is on the frequency, the range can be as little as fifty (50) feet. In a big motion picture scene, especially on a film that Ridley Scott is directing, there can be simultaneous action hundreds of feet apart. Prior to Zaxcom's invention of locally recording radios with simultaneous transmission to a remote recorder, the field mixer would capture as much of the dialog as his equipment would allow and the rest would have to be dubbed in during post-production editing. I can't emphasize enough the revolution these locally recording radios brought on. If the actors in a scene went in and out of radio range, the SD card on the transmitter would continue to record a backup recording of the audio. The built in receiver and time code generator within the transmitter would encode the audio so it could be easily re-mixed, even in the field, sometimes even after each take. Zaxcom also integrated all their equipment so a sound mixer could hit a single button on a Zaxcom recorder and all the radios in use would play back audio stored on the local audio device from a certain take or time code start point so the scene could be re-mixed without any radio dropouts or the need to re-shoot the take. Zaxcom has been doing this since 2005. 14 years! No other company has anything remotely close. Only Sony and Audio Limited have been able to introduce practical digital radio mics in the past few years, but they are still only comparable to Zaxcom's first-generation radios. Lectrosonics has radio mics that only operate on an outdated analog FM transmission. In the years since

Zaxcom first introduced digital radio mics, Zaxcom has cut their size in half, cut the transmission bandwidth tenfold from 1 MHz per channel to 100 KHz per channel (which is crucial since the FCC keeps selling off the frequency bands used by motion picture and television sound mixers). Zaxcom has added recording capability, long-range remote-control capability, and full integration with the other elements of the sound cart.

7. As a side note, the most important gain setting in any audio system is the first amp directly connected to the microphone. When using radio mics, that gain setting is in the transmitter, and that transmitter could be five hundred (500) feet away in someone's underpants. Being able to control that gain remotely from that distance is a life saver for the sound mixer and a great relief to the actor. NO ONE ELSE has remote control capability of more than a few feet, if at all. NO ONE else has local backup recording capability, NO ONE else has systems integration. NO ONE else has reduced bandwidth digital radios, and NO ONE else has micro-sized digital radios period.

8. In short, that Recording Engineer and Producer article that called digital radio mics the holy grail in 1999 was spot on, but the only company that has made that dream a reality is Zaxcom. Their innovation and engineering is ten (10) or more years ahead of any competition. I make my living as a production sound mixer. My success is in large part due to the equipment I use. If someone had

something better than what Zaxcom makes, I would switch to it in a heartbeat. But it won't happen. There is nothing even remotely comparable. Not by a long shot.

I hereby declare under penalty of perjury that all statements made herein of my own knowledge are true, and that all statements made on information and belief are believed to be true. I understand that willfully false statements and the like are punishable by fine, imprisonment, or both under 18 U.S.C. § 1001.

Executed on 4/3/25 in Santa Park, NY

By: 

William Sarokin