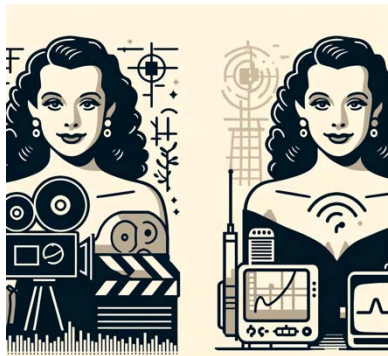


Name \_\_\_\_\_

## Hedy Lamarr: The Hollywood Star Who Pioneered Wireless Communication



Hedy Lamarr, a Hollywood actress known for her beauty and talent, had a hidden passion for invention and innovation that left an indelible mark on the world of technology. Her life's work, including the invention of a groundbreaking communication technology, continues to influence modern wireless technologies.

Born Hedwig Eva Maria Kiesler on November 9, 1914, in Vienna, Austria, Hedy Lamarr was destined for stardom from a young age. She pursued a career in acting, becoming a renowned actress in the 1930s and 1940s, known for her roles in films like "Algiers" and "Samson and Delilah." Her beauty and talent captivated audiences worldwide.

However, behind the glamour of Hollywood, Hedy harbored a deep interest in science and technology. Her father, a banker, encouraged her to explore her curiosities and fostered her love for invention. It was during her marriage to Friedrich Mandl, a munitions manufacturer and arms dealer, that she gained insight into military technology and weaponry.

During World War II, Hedy Lamarr and her co-inventor, George Antheil, developed a groundbreaking invention known as "frequency hopping spread spectrum." This technology aimed to create secure and unjammable communication between torpedoes and their controlling ships, preventing enemy interference. Hedy's idea was inspired by piano rolls, which she and Antheil used to synchronize changing radio frequencies.

Their invention involved rapidly changing the frequency of radio signals in a coordinated manner between the sender and receiver. This innovation served as the basis for modern spread-spectrum communication technologies, including Wi-Fi, Bluetooth, and GPS. While the U.S. Navy initially rejected their invention, it was later adopted and used during the Cuban Missile Crisis, laying the foundation for secure wireless communication.

Hedy Lamarr's contributions to technology went unrecognized during her acting career, but she is now celebrated as a pioneer in wireless communication. In 1997, she was honored with the Electronic Frontier Foundation's Pioneer Award for her groundbreaking invention.

Hedy Lamarr's legacy extends beyond her Hollywood fame. Her innovation and contributions to technology have had a lasting impact on the way we communicate in the digital age. Her story serves as a reminder that passion, curiosity, and creativity can lead to remarkable discoveries.

