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CLASSIFIEDS





DOCUMENT SECURITY SYSTEMS' UP OF R&D DAVID WICKER:

His Inventions Detect Counterfeits and Protect Brands

COUNTERFEITS COST U.S. BUSINESSES ALONE AN ESTIMATED \$200 -\$250 BILLION ANNUALLY

and pose a threat to public health and safety. As a leading security and authentication company, DSS has a rich history of providing inventions and products that help to prevent the counterfeiting and diversion of packaged goods, vital records, ID cards, other important documents and digital information.

ou might say that inventing is in David Wicker's blood. So is protecting innovative businesses and government agencies from having their important documents, intellectual property, and corporate brands counterfeited. David is Vice President of Research and Development at Document Security Systems, Inc. (DSS), a leader in anti-counterfeit and authentication technologies, which provides turnkey security solutions to corporations, governments and financial institutions around the world.

David heads an R&D team of technologists who are skilled in the art of document security, authentication, and digital security processes. DSS products are designed to protect brands and product packaging, as well as important documents such as drivers' licenses, vital records and other identity documents. They work by embedding hidden images, that resist duplication, into packaging, documents and electronic files.

These technologies fall into two categories: anticounterfeiting and authentication. Anti-counterfeiting technologies make it difficult for counterfeiters to accurately reproduce a document, label or package with a desktop scanner or a copier. Authentication technologies provide validation of genuine articles read through proprietary lenses, optically variable changes and even through DSS leading edge mobile device applications.

A FAMILY AFFAIR

The DSS story begins in the 1960s with David's father, Ralph Wicker. Ralph was a successful inventor who developed the first anti-scan technologies for currency images. His first patent was issued to him by the United States Patent and Trademark Office in 1963. In 1995, he was named inventor of the year by the New York State Eastern Patent Law Association. Ralph's sons learned from him and began inventing on their own in the 1990s. DSS and its predecessor companies, including the Wicker Group, have a long history of formulating the right innovative solutions designed to fight fraud. In 1995, David received a patent on an invention that embedded perforations in checks to deter alteration— a huge problem for the banking industry, as depicted in the movie, "Catch Me if You Can," directed by Steven Spielberg and starring Leonardo DiCaprio.

David's background reflects his deep roots in document security and authentication. He is carrying on his father's tradition of anti-counterfeit and authentication innovation. David joined DSS in 2002, as Vice President of Operations and was named a director of the company in December 2007. As Vice President of Research & Development for the company, David directs the technical operations to support its patented

Ralph Wicker, David's father, was named Inventor of the Year by New York State Eastern Patent Law Association in 1995.





COMPANY TIME LINE



and patent pending document security technologies.

David has been awarded several patents and has many patent applications in the anticounterfeiting field. He is an active board member of the Document Security Alliance (www. documentsecurityalliance.org), and a member of the Center for Identity Management and Information Protection (www.CIMIP.org), and the U.S. Chamber of Commerce Anti-Counterfeiting Coalition (CACP). Prior to joining DSS, David consulted for

banknote and security printers, including the oldest and most respected security printer in the United States.

"Providing advice to governments, treasury departments and corporations around the world is both exciting and rewarding," notes David, "but it also is highly confidential." "Most of the time I can't even tell my wife who we are working with. Judging from the amount of repeat business we have received over the years, however, these agencies and businesses regard what we provide as important and useful to their security goals."

From 1991 to 1998, David served as a member of the Wicker Group and was involved in security printing licensing

United States Patent 119 itia Patent Number: 5,454,598 [45] Date of Patent: Wicker Oct. 3, 1995 54 TAMPER AND COPY PROTECTED DOCUMENTS uary Kunniner-Willmon Fridia may, Agent, or Firm-Robert J. Bint David M. Wicker, 4523 Red Sc Rf., Dansville, NY, 14437 ABSTRACT Appl. protected do-[22] Apr. 19, 199 arinted. Im 283/6 283/93, 95, 105-107, 109, 11 References Citer U.S. PATENT DOCUMENTS 8 Claims, 2 Drawing Sheets 420 ушттівт 20 22 43 ro_____ **\$**11,000,000 43 23 DOLLAR

and implementation of newly patented technology to more than 60 forms printers in numerous countries. His work included the development of trade techniques designed to provide more fluid integration of secure technologies, which were implemented through on-site technical training for web press operators around the country.

David founded Document Security Consultants Inc. (DSC) in 1995, to sell and design security documents containing Wicker technologies. From 1995 to 2001, he was involved in a number of document security

initiatives, including the development of Wicker2000[®] technology to combat the newer color copier threat, and a "safety paper" concept, containing Wicker2000 technologies. He successfully introduced "safety paper" to several hundred paper distributors worldwide. In 2002, he sold DSC to Document Security Systems, Inc.

EXPERIENCED R&D TEAM

While the Wicker family, Ralph— who passed away in 1997, David and his siblings, were the base of innovation at DSS, their inventions would not have evolved into the formidable portfolio of security technology it is today without the support of the DSS R&D team, consisting of experienced document, printing, packaging and digital technologists. The team includes Michael Caton, Chief Technology Officer, who joined DSS in 2004 and who has worked alongside the Wicker family as part of the Wicker Group and has over 25 years of experience in the printing security and packaging field.

Michael serves the technical needs of DSS patented technology with licensees and within DSS production facilities. He has worked closely with Dave and other team members, including Tim Trueblood and Mike Roy, who lead the digital division at DSS; Jaeson Caulley and Mike Caulley who lead the plastics division; Gary Andrechak who is an RFID expert based in the plastics division; and Nicole Acton, a member of the corporate office, to develop what has become among the most sophisticated anti-counterfeiting and authentication technology in the world for documents such as car titles, birth certificates and brand packaging. Along with David, Michael Caton is a named inventor on numerous domestic and international DSS patents.

GIVING BACK TO THE COMMUNITY

David has been invited periodically to teach document forensics seminars at the Rochester Institute of Technology (RIT), one of the world's leading engineering universities. One



Members of the DSS Research and Development Team (left to right) top row: Nicole Acton, Rick Parinello, Michael Caton, David Wicker; front row: Adam Darder and Tim Trueblood.

section of a seminar that David teaches is called "Printing Process Identification and Image Analysis for Forensic Document Examiners," which is attended by students and government security specialists in many U.S. agencies.

In a city like Rochester, home to Xerox, Kodak and other major document management companies, it is a great honor to be asked to serve as an instructor for an advanced course on imaging forensics that help to identify and prevent criminal activity.

"DSS is not only about inventing new products that protect brands and documents, but sharing its knowledge and experience about how best to use the technology, with the right people," says David, who turned 54 this year. "Our know-how is protected under confidential information, trade secrets and patents, and the company has many technology licenses in place."

DSS (NYSE MKT: DSS), which has been public since 2002, has spent more than a decade developing and refining its technologies, resources, and manufacturing capabilities. In addition to its AuthentiGuard[®] technology suite, also known as AuthentiSuite[™], a line of patented overt, covert and digitally authenticated technology, the company owns and operates manufacturing facilities, including DSS Printing and DSS Packaging in Rochester, NY, DSS Plastics in Brisbane, CA, and Rochester based DSS Digital Group which specializes in cloud computing and digital implementation of DSS security technologies. DSS Technology Management is based in Virginia and provides strategy for DSS's IP portfolio, as well as legal expertise and investment capital for pioneering inventions.

The DSS story is really about the evolution of modern print and digital technology. As better quality and less costly document copiers came into the market in the 1990s, along with the advent of the desktop scanner, opportunities to alter and falsify documents grew rapidly. With the everexpanding popularity of online shopping, fraudulent websites have opened the doors to easy marketplaces for counterfeit goods. In 1993, DSS had just two anti-counterfeit inventions protected by patents. Today, it has eleven, as well as numerous applications on file with USPTO.

The aspects of DSS inventions that can be reported publicly include inventions that detect hidden authenticators that are validated by a cloud based smart phone app, security documents that reveal warning messages on copies and scans, protection for barcodes that diminishes the barcodes function on copies and scans, tip to view features and more.

"Because technology evolves so rapidly, the digital security and authentication business must work hard to remain one or more steps ahead of counterfeiters in a broad range of fields," concludes David. "One of DSS biggest challenges is to



AUTHENTISITE

"DSS is not only about inventing new products that protect brands and documents, but sharing its knowledge and experience about how best to use the technology, with the right people."

understand the thinking of those who engage in fraud to stay ahead in terms of innovation and technology.

"For the past 30 years, we've managed to do that effectively. As information continues to go digital, the next decade will present even greater threats to brands and packaged goods, both domestically and globally. At DSS, we're up for the challenge and any of the many surprises that are likely to occur along the way."