

# Casinos place their bets with Applied DNA

## Exclusive distribution deal ups ante on forgery-proof security markers

By GREGORY ZELLER

Things just got a lot harder for Ocean's Eleven.

Thanks to unique detection protocols devised by a Florida security expert and its Stony Brook-based partner, casinos from Vegas to Macau are taking better care of their poker chips, playing cards and other potential targets of crafty counterfeiters.

Defrauded and frustrated by phony gambling paraphernalia, small and large casinos have long sought a silver bullet against such thievery – and may have found it in a two-part system combining leading-edge security inks with botanical DNA.

With its high-profile casino clients suffering fraud's sting, distributor Palm Gaming International of Daytona Beach, Fla., placed its chips on Jupiter, Fla.-based H.W. Sands Corp., a "product differentiation" specialist that develops and distributes custom dyes and chemicals used to mark various products.

This was a unique challenge for H.W. Sands: Alone, its chemical markers could be duplicated, especially by high-tech counterfeiters targeting the casinos. A second security layer was required, something that would truly immunize the chips and cards against these ingenious grifters.

The company, which partners with various firms on numerous corollary products, offered Palm Gaming several options, and "the one they found most appealing was Applied DNA," according to Jeff Strahl, vice president of H.W. Sands' security division.

Applied DNA Sciences of Stony Brook – which patents DNA-

based security solutions for products, brands and even intellectual property – was now in the game. By combining its trademarked SigNature DNA, gathered exclusively from botanical sources, with H.W. Sands' unique markers, casino property could be protected by an easily detected and completely forgery-proof security blanket.

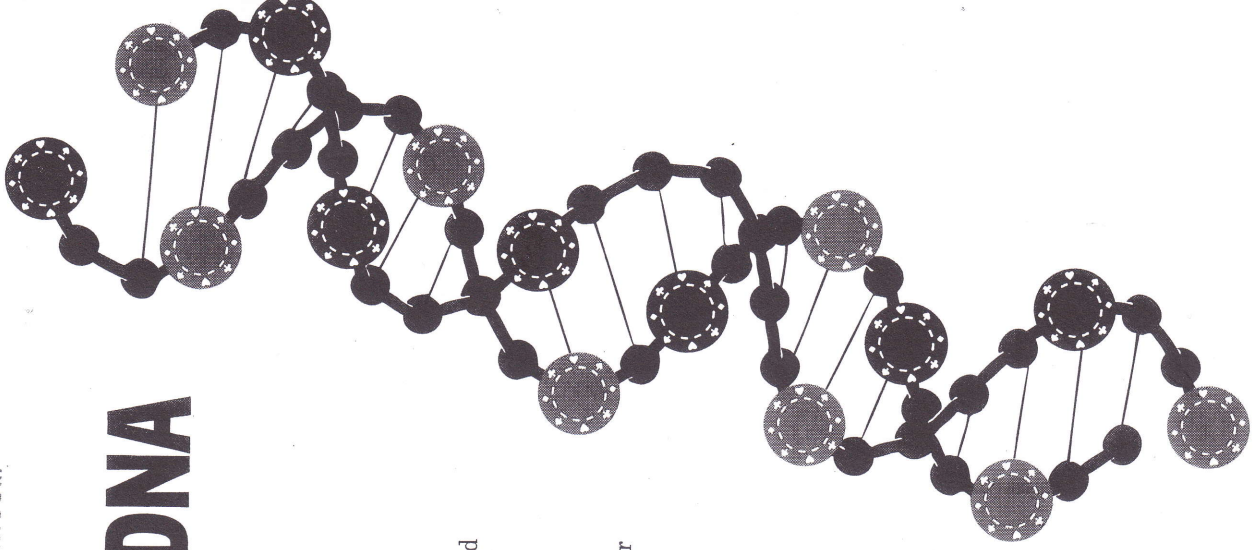
The SigNature DNA and an H.W. Sands' instant-detection marker such as fluorescing ink are integrated into the printed insert layer of a gaming chip (the layer with the casino's logo, for instance). An ultraviolet fob light can then be used to quickly authenticate the chip – and to sniff out fake chips smuggled in by cheaters.

"We encrypt the DNA so it cannot possibly be copied, even with a genome machine," Applied DNA spokeswoman Janice Meraglia said. "DNA in itself is not easy to copy. You have to have tremendous intellect and superior equipment to do it. And on top of that, we do our own special sauce."

The good news of working with DNA as a security device is that a single DNA molecule contains an enormous amount of information. That's also the bad news: It can take a while to plow through the genomic code and make sure the DNA you're scanning is the DNA you're looking for. That's where the marriage of Applied DNA's science with H.W. Sands' markers becomes critical.

"We put our DNA into a security ink that allows for a rapid scan that can be done with a handheld detector, in a casino or wherever it needs to be," Meraglia noted. "It's a lock-and-key technology. It's not just the encrypted genome; it's two parts

See DNA, 31A



# DNA: Casinos use coded chips

From 16A

you need together to make it work.”

For security reasons, Palm Gaming won't reveal which casinos are employing this new technology. But the distributor – which is finalizing a deal with H.W. Sands to become the gambling industry's exclusive dealer of SigNature DNA-encoded devices – butters its bread primarily in Las Vegas, as well as numerous Native American-owned casinos and various private markets, including what Strahl termed “high-end personal clientele.”

“They probably like the novelty of it, rather than the security,” he said of those individual clients. “They can say ‘I use the world's most super-high-security poker chips when I play with my buddies on Thursday nights.’”

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SigNature DNA's potential usage extends well beyond the gaming industry. Palm Gaming is the first deal struck since H.W. Sands and Applied DNA announced its partnership earlier this summer, but according to Meraglia, the encrypted DNA/rapid-detection marker process has virtually limitless security applications.

“Microchips, cotton shirts, silk scarves, crude oil ... this application is very broad-based,” Meraglia noted. “We can use it to mark everything from wine bottles to electronic components to secured documents.”

Partnering with Applied DNA is “an excellent opportunity” that's opened several new doors, Strahl said. “H.W. Sands has represented various products over the years, and we keep on refining ourselves – looking for the next thing, the most innovative thing,” he said. “Things that can't be duplicated, so our clients can stay a step ahead.”

# Museum: Other sites

From 16A

Epley said. “They chose to point their ship at another location, another building.”

Sultan said that in addition to criticism over its plans, the museum would have faced high costs to renovate a building it didn't own.

“There was a lot of resistance to the museum doing anything on the property that would endanger the trees,” Sultan said. “We had no plans to destroy this building. It's a landmarked building.”

Rather than continue to fight, the museum considered moving onto the Southampton campus of Long Island University, before the state acquired that property. In 2005, the museum bought the property where it plans to move for \$3.8 million.

Challenges persist. “I think it will be a difficult place to get in and out of,” Epley said of the new location. “They lost all their foot traffic.”

But Steven J. Abramson, a member of the Water Mill Citizens Advisory Committee, said the new museum's parking will be more accessible.

“For the people on the East End, it's an asset that's easier to reach,” he said. “It's going to be a traffic magnet on its own. No question.”

While Abramson's rolling out a welcome mat for the museum, he worries other development could turn the intersection of County Road 39 and Route 27 into a bottle neck.

“It's an exception,” he said. “The building is going to be a beautiful edifice and will fit into the environment. It'll be a big cultural addition to Water Mill.”



Rendering of the Parrish Art Museum's new facility.