Startup develops germ-fighting wall coating

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Like most medical clinics, Reno’s Gastroenterology Consultants aggressively seeks ways to improve sanitation and reduce the threat of infection.

The clinic’s executives have taken a new tack in that fight: Application of a wall-coating manufactured by a Reno company that’s been shown to dramatically reduce bacteria in the air and scrub smoke, pollutants and odors from the air at the same time.

Jan Prochazka, president of FN Nano Inc., hopes the installation of his startup company’s product by Gastroenterology Consultants will give the FN Nano’s marketing efforts a boost.

Prochazka, who put his doctorate in chemistry to work at BHP Billiton’s research and development operation in Reno (the lab was acquired by Altair Nanotechnology), explains the company’s coatings are based on titanium dioxide.

The mineral, the most widely used white pigment in paint, resists with sunlight or artificial sources of UV light to create photocatalytic activity that kills viruses and bacteria and removes odors, allergens and pollutants from the air.

Connie Brown, director of operations at Gastroenterology Consultants, says the clinic chose FN Nano’s wall coatings because the sanitary effort is entirely physical and doesn’t involve any chemicals.

And she says the patented products developed by FN Nano Inc. appear to be 10 to 100 times more effective than photocatalytic products developed by the French company’s competitors.

And Prochazka has no doubts about the potential of FN Nano’s technology.

“This,” he says, “is the next generation of construction products.”

But moving a technology, however promising, into the market is challenging for the little company with big competitors.

“When you don’t have any money, you replace it with work,” says Prochazka.

After defecting from the former Czechoslovakia to the West in 1999, Prochazka worked in Great Britain and the United States and completed his doctorate in chemistry.

In the meantime, his father and sister both of them engineers launched a company in the Czech Republic in 2003 that focused on ceramics and water treatment products.

Prochazka bought a share of the Czech company, left Altair in 2005 and developed a binder that’s at the heart of FN Nano’s products in 2007.

The Czech company began manufacturing photocatalytic wall coatings, and Prochazka lined up distributors worldwide. The company, he says, has made good inroads in European, Australian and Canadian markets.

He joined with former colleagues at BHP Billiton to create the American company this year. FN Nano Inc. holds a distribution and manufacturing license with Czech company.

Prochazka says the company hasn’t necessarily sought out big paint and wall-coatings companies to distribute its products as it rolls out worldwide sales.

“A motivated individual can do much more than a large company,” he says.

Potential markets cover a wide swath: schools, food-service operations, households battling pest odors, to name a few. And Prochazka says the company believes it can reduce its production costs dramatically as sales volumes increase.

FN Nano Inc. operates a small production facility along Longley Lane in south Reno. It doesn’t yet employ full-time workers, but instead calls in its founders as needed to whip up a batch to meet orders.

At the same time that it’s working to reduce its production costs, FN Nano Inc. is focused on efforts to create industry-wide rating standards for the efficiency of photocatalytic products.

While Prochazka expects the creation of standards could take three to eight years, he says FN Nano’s owners aspire the company would be a major beneficiary of standards that show its product is superior to those of competitors.