

## **L.B. Water Treatment Program Gets Patent**

*Process might now earn money for its developer, Diem Vuong, and for the city itself.*

**By Mira Jang**

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**Friday, September 08, 2006 - LONG BEACH** - "The Long Beach Method" may soon become a household name.

The city's desalination process, developed by engineers at the Water Department, has received a patent from the United States Patent and Trademark Office, city officials announced Thursday.

"This verifies that the technology is truly unique and is truly a breakthrough," said Kevin Wattier, general manager of the Water Department.

The news comes more than four years after the department filed for a patent, which protects the technology from unlicensed users.

It also opens up the possibility of the city earning significant revenue from the sale of this method to other governments and private companies. This could mean lower water rates for customers, Wattier said.

The idea for this two-step filtration process emerged in 1999, when a manager at the Water Department decided to find a way to lower the amount of energy needed to make seawater potable.

Diem Vuong, who last year retired from his post as the department's assistant general manager, invented "The Long Beach Method," which uses less pressure to purify seawater by adding a second layer of membrane, or filter.

"(My father) is happy and relieved that it finally came through," Vuong's son, Phong, 31, said. "It's a validation of all his work."

Vuong could not be reached for comment.

The unique method has been shown to be 20 percent to 30 percent more energy efficient than reverse osmosis, which is considered state-of-the-art technology, according to the Water Department.

Vuong, who works as a consultant to the department, shares the patent, and all potential proceeds, with the city.

The department has not set a price for the technology or created a marketing strategy, Wattier said.

"Right now, we're focused on perfecting the technology and finishing the research," Wattier said.

Research is expected to be completed in 2009.

It could take five to 10 years before the technology is on the market. The city is looking into patenting the technology in Asia, the Middle East, and Australia.

"There isn't much of a market in the United States," he said.

For the next two to three months, city officials will be working with a patent lawyer to specify the details of the patent. City officials expect the patent to be issued by March.

"We're trying to make it as broad as possible," Wattier said.

In its second phase of testing, the method produces 300,000 gallons of desalinated water each day at a research plant in East Long Beach near the Haynes Generating Station.

If the testing and research are successful, the city plans to build a 10-million-gallon-a-day plant that could supply 10 to 15 percent of the city's water supply.