

# New Device To Combat Noise Pollution

BY HEATHER GIRGENTI

Noise pollution can be a problem for some people, particularly when it happens in their own homes.

But now there is a new device that can be used in the testing stages of acoustic installations, thanks to Bonnie Schnitta, founder and president of SoundSense, an acoustical engineering consulting company based in East Hampton. Ms. Schnitta has just been awarded a patent by the International Institute of Acoustics and Vibration for her invention, the dB focus tube, a "Sound Focusing Mechanism and Method of Estimating Acoustic Leakage of an Object and Method of Estimating Transmission Loss of an Object."

This new small, portable acoustic testing mechanism is used to evaluate disturbing noises. And the device can guarantee a solution to that problem, according to Ms. Schnitta.

"Back in 1981, I started a consulting firm called South Fork Technological Consultants and all I did was acoustical engineering consulting," Ms. Schnitta said during a phone interview last Tuesday. "We receive complaints from people saying, 'every time I turn on the TV in one room, you can hear it in another' or 'I'm in the bathroom and I can tell what someone in the adjacent bathroom is doing' etc., and we would go in to treat that problem."

Ms. Schnitta added that she can also treat a room for a senior citizen so they can hear better, treat restaurants so they aren't as noisy or treat a room for a home movie theater.

In 2001, Ms. Schnitta changed the company name to SoundSense but continued doing the same kind of work, though there have been some hitches in the technology along the way.

"We started getting frequent complaints that some of the treatments weren't working," she said. "But it is a science, so it has to work. The problem was, at the



Bonnie Schnitta

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time there wasn't anything on the market that could help us find the source of the problem."

That is when Ms. Schnitta's acoustical engineering career changed. With the invention of the dB focus tube, which she started developing 10 years ago, experts in the field could determine at what frequency there was a failure.

Now, SoundSense can guarantee that a user won't hear sounds from another room if the company does the engineering and the installation.

According to Ms. Schnitta, the device works by focusing it into a section of the wall that is believed to be solid, and then shooting sound into areas that are thought to be the problem. In doing so, it can be determined whether the wall is failing because of the acoustic anomalies (holes in design), or if it is the wall itself or perhaps, both.

"We can then say, we can fix these acoustic anomalies, how much it will cost and you'll be happy," she said. "Or we can say there is no anomalies, so you'll need a new wall or in some cases, you might need both."

In short, the dB focus tube allows experts to measure how much sound is traveling from room to room and where it's coming from so the noise disturbance can be eliminated.

Another valuable feature of the focus tube is that it is audible even during construction, which means it is possible to take a reading without having to interrupt other workers on a construction site.

The dB focus tube will be sold at Riverhead Building Supply locations starting in November, Ms. Schnitta reported. Additionally, there will be another, more complex, more expensive device available for acoustical engineers.