



Barry Swenson always knew his company's concrete construction methodology was something pretty special. Now he has the United States patent to prove it.

Earlier this year, the U.S. Patent and Trademark Office issued the veteran builder's San Jose-based company a patent for what's called "Landmaker," a structural system that has now been implemented in roughly a half-dozen high-rise projects in Silicon Valley.

In a recent interview Barry Swenson stated, *"I really thought it was too simple to be patented, but my colleagues said this is really something."* The company's chairman, went on to say, *"it's very hard to be simple, but when you see it all done, you don't see how much work to get to where we are. It's like putting a patent on a mouse trap: It works."*

The patent recognizes the **"A method of modularly constructing a multi-story building in a cost-efficient manner"** in which the shear walls are "out boarded," or constructed floor by floor closer to the edge of the building, rather than around a central elevator or stairwell core. (Shear walls, or "earthquake walls," counter the effects of wind or seismic activity.)

The final result is that *"it's a lot easier and less complicated for the subcontractors to build,"* said Joshua Burroughs, an executive at Barry Swenson Builder. *"Because the shear walls are outboarded, and the whole building is more structurally sound, it allows us to get away with a thinner slab so you end up using less materials."*

Landmaker was developed during the early 2000, because the company was looking to reduce costs associated with high-rise construction. Burroughs said that *"We (BSB) were looking at a way to deliver that kind of density in a single phase, but to lower the risk profile. [Barry] brought all his top engineers he'd worked with for three decades to figure out a way to deliver a super-safe, efficient building that cut that down."*

Those engineers — who are listed as inventors of the Landmaker along with Swenson — include Hardip Pannu, a structural design engineer who worked on Sky Harbor International Airport in Phoenix; Don Peoples of Peoples Associates Structural Engineers; and Swedish engineer Bo Lundmark. The legal “assignee” of the patent is Green Valley Corp., Barry Swenson Builder’s parent company.



One recent project employing Landmaker that just finished up is Centerra, a 21-story, 347-unit apartment tower that Swenson originally designed. It was purchased and built by the AFL-CIO Building Investment Trust in partnership with Simeon, the San Francisco-based firm. Essex Property Trust and Barry Swenson are also partners on Century Towers, a pair of 10-story apartment buildings on North First Street that will include 376 units. It should be open this winter.

While concrete construction is typical for high-rise residential towers, it is still rare for commercial buildings, where steel frames are the norm. (As with all things in construction, there are trade-offs; steel frames, for instance, can be erected quicker than concrete structures.) Swenson said he hopes that commercial builders and corporate owner/users take a look at concrete. (Indeed, there are some signs that is happening; Federal Realty is building concrete office buildings at Santana Row partly because tech companies purportedly like the look of them.)

Swenson said he’d consider licensing the structural system in other markets, which means one day you could see the company’s stamp far from Silicon Valley.

*“It should help marketing for one thing,” Swenson said. “The other thing is it would just help save a lot of lives.”*



Swenson Awarded U.S. Patent for Structural Engineering Design

Source:

<http://www.bizjournals.com/sanjose/news/2016/06/06/barry-swenson-san-jose-developer-builder-and-now.html>