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For immediate release

Beam 4K Patent Pending covers projector adaptations to help stop transparent-pane glow-through.

Beam 4K, Inc. (Chagrin Falls, OH) announces Patent Pending status for its intellectual property claim entitled "Enhancing microlouver glow-through protection by controlling ultra-short-throw-lens specifications." The challenge of making a display screen transparent to a rear-mounted camera while also preventing the light from a front projector from glowing through the screen proved critical, not only because of the undisciplined appearance of light-wash on the walls and ceiling behind the screen but also because of its high potential for blinding the camera.

"It's not just about our screens," Beam 4K Inc. CEO Martin Winston explains, "because the same concerns are in play for vehicular heads-up displays, secure kiosks, store window displays and others. I admit to beginning this project with a focus on electronics hardware, but by comparison, that turned out easy. Optics and materials science and other corners of physics and chemistry presented bigger challenges. It's made me very grateful for how much today's spreadsheets simplify so much of the burden of trigonometry — you know, one of those corners of math that we all thought we'd never deal with again after high school."

Ultra-short-throw (UST) lenses on projectors are a way for a projector to be placed very near to a screen while still casting a large image. This Beam 4K intellectual property claim addresses the angle relative to the bottom of a screen at which the bottom of a projected display encounters the screen. A limited range of angles allows for effective deployment of glow-through-preventive measures without compromising image brightness or screen transparency and without impacting the view of a rear-mounted camera.

For Beam 4K, Winston describes many of their solutions as "design by scowl". He shares, "We would see ways to address these issues that worked but cut the projector's brightness by more than 75%. We would see films that helped but not without introducing messy patterns. I think that – and not just for us – a lot of invention comes down to seeing something you don't like and stubbornly deciding there's a better way to get it done."

Beam 4K, Inc. develops proprietary hardware and software (46 Patent-Pending claims) to make it easier for online meetings to communicate more, communicate better and end sooner.

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