Georgia Grace Edwards U.S. Senate Judiciary Committee Testimony: Subcommittee on Intellectual Property Improving Access and Inclusivity in the Patent System: Unleashing America's Economic Engine April 21, 2021

Good morning! I would like to start by thanking Senator Leahy and his staff for their work to improve access and inclusivity in the U.S. patenting process. This push for greater diversity and outreach efforts in American intellectual property is an initiative with the potential for tangible effects, not just on my small business or others like mine in the state of Vermont, but on individuals and businesses across our nation. I am only twenty-five years old, but I have a feeling that this opportunity to share my experience as an American entrepreneur and inventor will be among the greatest honors of my life, and I am grateful to you all for having me.

SheFly® is a layerable line of outdoor pants for women that allows us to safely, comfortably, and easily answer nature's call—quite literally speaking—without exposing skin to the elements or other people. Our patented technology features a zipper and accompanying flap, which begin at the base of the zipper we're accustomed to using to get our pants on and off and extend all the way to the back of the pant, so that the user can control the size and location of the space they need to create in order to relieve themselves. Through this design, we are able to help the 1 in 3 women who have had a bathroom accident in the past year while adventuring outside—a statistic that has presumably only increased during the COVID-19 pandemic, as more Americans have taken to the outdoors and more public restrooms have closed.

As a Vermont small business owner, my ability to protect my ideas was crucial to my ability to scale and succeed. Patenting is extremely central to our business model. In our country's vibrant and highly competitive start-up ecosystem, patents make or break an entrepreneur's ability to signal legitimacy in a market, gain new customers, establish additional revenue streams through licensing, and achieve a favorable valuation with investors. More importantly, our patents are what will allow us to bring our technology to people in all different sectors-not only rock climbers, hikers, backpackers, mountaineers, and guides, but also field scientists, ski patrollers, farmers, carpenters, bridge inspectors, engineers, international aid workers, park rangers, people who use wheelchairs, police, and women on the front lines of our military. Women risking their lives to protect American citizens have more important things to worry about than when and where they can next relieve themselves. They deserve the top technology our society has to offer, and adult diapers, as we say where I'm from, "ain't it." As former U.S. army captain and current Director of Innovation and Entrepreneurship at the U.S. Department of Commerce Emily Miller says, "Pants that don't work for women are a safety issue. I have far too many stories of having to stop my all-male platoon of soldiers to go pee by myself on a dangerous highway in Iraq or [risk] dehydrating myself so severely I'd be sick. I ended up breaking my leg fast-roping out of a helicopter in Afghanistan in part because I was wearing clunky men's gear. We deserve gear designed with women in mind." We wouldn't be able to deliver on that gear if it weren't for our ability to patent, And because I'm aware that this subcommittee is three-fourths male, you might be interested to hear that yes—we average several emails a month from men interested in utilizing our technology for their needs, too. Patents increase the reach of good ideas and the number of people in our society who can benefit from them.

How is it that America has been able to put a man on the moon (and spacecraft on Mars), but is somehow still stumped about how to help female soldiers go on the go? Well, intellectual property rights do not come easily, especially for traditionally underrepresented groups. We are a company whose existence can be attributed to the work of trail-blazing women who paved the way before us, and we see this hearing as an opportunity to do the same for the young, female, and rural innovators who are similarly creating inclusive design. My hope is that by sharing SheFly's experience, we can work together to make the patenting path a bit smoother for those who will walk it next, especially for those who do not currently see themselves reflected in the process.

In navigating the trademarking and patenting process, SheFly® faced three specific, interrelated barriers: 1) the representation barrier, 2) the knowledge barrier, and 3), the financial barrier. These obstacles operate in a positive feedback loop, further entrenching detrimental cycles that prevent the U.S. from effectively taking full advantage of the brilliant ideas that everyday Americans have to offer.

For an entrepreneur, the initial steps in building a company involve talking to people—cold calling, black-hole emailing, putting out feelers-making connections with those who have been through it before and can advise on helpful contacts and tips. I imagine it's not too different from your experience in politics. In the Middlebury Entrepreneurs class where I built out SheFly®, I spent an entire month doing just that, and was unable to find a single person with my background who had been through the intellectual property process in my industry. In fact, I didn't talk about patenting to anyone who wasn't a wealthy, middle-aged white male in the field of engineering or tech. While those connections provided some advice, it wasn't always advice that was relevant or useful to me, as a 22-year-old female college student working 2 jobs and trying to break into the outdoor apparel industry from a rural town in the Green Mountains. The power of representation is greatly underestimated. When you don't see anyone who looks like you doing something you want to do, it makes you question whether it's even possible in the first place. Starting your own business is hard enough. Starting a business in a field where you don't know anyone and haven't seen anyone who looks like you obtain intellectual property before is an utter shot in the dark. If it weren't for the realization that "If not me, who?", I would have foregone the process on these grounds alone.

The lack of representation in turn leads to a lack of insider knowledge. Patenting in the U.S. is extremely intimidating: long, clunky, opaque, and bureaucratic—and that's my kindly worded, highly edited description of the process. IP law is a very niche body of knowledge; it's hard to teach yourself, no matter how many honors you graduate with. As senators, you

have some of the best researchers in the country on your staff, but set them loose on a patenting process goose chase, and I suspect they will end up with more questions than answers. In fact, there have been several instances where I'm in the trenches alongside our very bright and reputable Burlington-based lawyers, teaching them the differences between certain claims, re-drafting relevant language, and helping to perform patent searches. The lack of access to a centralized resource with clear information on the trademarking and patenting process that is specific enough to help gauge particular needs and likelihoods of individual intellectual property is why most sources recommend hiring patent attorneys, which brings me to the next barrier.

If you think you've spent a lot on the coronavirus relief bill relative to your overall budget, you should see how much SheFly® has spent on legal fees over the course of the past two and a half years. There have been points in time where SheFly® has spent well over 50% of our revenue on legal fees to cover the immense amount of labor, time, and costs associated with filing. From a basic economic standpoint, the long-term, up-front investment in intellectual property is one that is often directly at odds with the short-term realities of start-ups and small businesses. When faced with the difficult decision of purchasing needed fabric for a production run, paying a local seamstress for her help iterating on prototypes, or deciding to file another type of patent or a patent in an additional jurisdiction, the choice to push for patents almost always falls to the end of the list of priorities, despite its potential to create the largest future revenue streams. SheFly® has seen a lot of success, but even as recently as last week, we have had to forego patenting opportunities for lack of the necessary capital. Due to the high cost and low probability of reward through patent approval, entrepreneurs are not incentivized to pursue intellectual property in our current economy.

The less you see people like you obtaining intellectual property, the less likely you are to have all the information necessary to make informed decisions. With limited access to said information, the more likely you are to need to hire legal counsel, which results in less capital available for important start-up steps needed to accelerate. The less cash flow you have, the less likely you are to succeed and to obtain patents, resulting in fewer people who come to own intellectual property. This is the extremely challenging cycle of interconnected barriers that have kept women, people of color, young people, and people living in rural areas with lower socioeconomic statuses from fully participating in U.S. entrepreneurship. By perpetuating these cycles, we're missing out on a plethora of ideas that could contribute to the well-being of American citizens and our standing on the world economic stage.

In closing, I'd like to emphasize that any proposed legislation that fails to recognize and address the representation, knowledge, and financial barriers to entrepreneurs and small business owners will be incomplete. I appreciate the opportunity to share SheFly's story on this virtual Senate floor and I look forward to seeing how the Senate works to improve access and inclusivity in the patent system. I envision a world where one day, women and girls don't have to think twice about answering nature's call—or about their ability to participate in the U.S. economy as inventors, entrepreneurs, and business owners. I and so many others are counting on you to change the traditional narrative of entrepreneurship in America.

Thank you.