

# FREEDOM TO OPERATE

-PRESS RELEASE-

## Freedom to Operate Releases Study to Protect the Development of LSD-based Therapies from Unfounded Patent Claims

### New study establishes the existence of a single polymorphic form of LSD D tartrate

Greenwich, Connecticut, April 13, 2022 – The non-profit, [Freedom to Operate](#) (FTO), has just published [new research](#) on the polymorphic form of LSD D-tartrate, a common salt form of LSD. In furtherance of its mission to advance science and education, specifically research, in the public interest and for the public benefit, this new FTO sponsored study can be used by researchers, patent examiners and others to reject unfounded claims and to fight back against anyone attempting to patent a polymorphic form of LSD and its salts. In doing so, FTO is taking a critical step to help protect and advance research and the development of LSD-based therapies that may eventually benefit millions of currently underserved patients.

First studied from the 1950s to the 1970s for the treatment of a range of mental health conditions, Lysergic acid diethylamide (LSD) and its derivatives are currently the subject of promising research into their potential therapeutic use to treat a range of neurological, mental health and neurodevelopmental disorders, including cluster headaches, alcohol use disorder, opioid use disorder, migraines, anxiety disorder and attention deficit disorder. However, research into the medical benefits of LSD and its derivatives, and sales of any approved LSD-based medicines, could be discouraged, impeded or even blocked if anyone attempts to obtain a patent on the chemical structure or polymorphic forms of LSD and its salts.

According to Carey Turnbull, Founder and Director of Freedom to Operate, “FTO has sponsored and published this research so that any LSD researcher can benefit from this information, and it can be used by patent examiners and others to reject claims attempting to patent certain physical forms of LSD and its salts.”

Patents are awarded when a claim to a new invention is determined to be useful, novel and non-obvious. Such claims, when validly made and awarded with a patent, allow patent holders the exclusive use of their inventions. However, patent applications can be denied and existing patent grants revoked when evidence exists that the invention claimed was publicly known or obtainable prior to the filing of a patent application. Known as “prior art”, this evidence includes the publication of research such as the FTO sponsored study that has just been made available via [FTO’s website](#) and has been submitted to [Porta Sophia](#), a non-profit website that protects psychedelic technologies in the public domain.

When LSD is made in a lab, it can be turned into a solid through crystallization. This process creates crystals that contain molecules that repeat through space and settle into ordered patterns known as a polymorphic form, each with its own unique profile. These forms can be differentiated by using a laboratory technique known as X-ray powder diffraction to refract x-

rays off-samples. FTO engaged an experienced independent chemical analysis laboratory to conduct the research. The researchers discovered that LSD D-tartrate, the most researched of the two forms of LSD tartrate, exists in a single polymorphic form, which they have designated as Form A. In establishing the existence of this single polymorphic form of LSD D-tartrate, this research will prevent others from claiming and being awarded a patent based on an alleged invention of this polymorph.

“This research establishes prior art on the existence of a single polymorphic form of LSD D-Tartrate”, said Turnbull. “By publishing this information and preventing patent claims we are ensuring that this potentially life-changing molecule will continue to be available for use in research and the development of treatments for patients.”

### About Freedom to Operate

Founded by Carey Turnbull in 2020, Freedom to Operate is a registered Section 501(c)(3) non-profit organization dedicated to advancing science and education, specifically research, in the public interest and for the public benefit.

“Freedom to operate” is a term of art in the field of intellectual property law, and refers to the ability to develop, manufacture, and market products without legal liabilities to third parties who claim intellectual property rights in those products. There is an important public policy interest in invalidating bad patents and promoting free competition that does not infringe on validly granted patents and other intellectual property rights. Issued patents are presumed valid and so operate to discourage investment by others into the same or similar subject matter. The public is benefited when potentially incorrectly issued patents are challenged or obviated.

**For more information, please visit [www.freedomtooperate.org](http://www.freedomtooperate.org)**

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