UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

UATP IP, LLC,
Petitioner,

v.

SLICK SLIDE LLC,
Patent Owner.

Case PGR2024-00054
Patent 11,998,854

PETITIONER'S REPLY TO

PATENT OWNER'S PRELIMINARY RESPONSE

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Patent Owner's Preliminary Response argues for denial of institution based on claim constructions that seek to improperly narrow the Challenged Claims beyond their unambiguous ordinary meaning. Section I of this Reply demonstrates that Patent Owner's narrowing constructions are legally erroneous and ineffective at averting the Petition's obviousness grounds. Section II confronts Patent Owner's misplaced request for discretionary denial under § 325(d).

I. PATENT OWNER'S NARROWING CLAIM CONSTRUCTIONS ARE LEGALLY FLAWED AND DO NOT PRECLUDE OBVIOUSNESS

A. "Coefficient of Friction" (elems. [1c], [27c])

1. Patent Owner cannot justify narrowing the claimed "coefficient of friction" to a specific ASTM 1894 Protocol

Composed of "commonly understood words," *Phillips v. AWH Corp*., 415 F.3d 1303, 1314 (Fed. Cir. 2005), the recited "coefficient of friction" is a common phrase that a POSITA would have understood without the need for any substituted terminology, as evidenced by the straightforward description of the '854 patent and the plain usage by others at the time. Pet., 4, 26, 68-69; UATP-1003, [0039]-[0042], [0105], [0109], [0223]. Patent Owner does not allege any ambiguity in the words "coefficient of friction" nor does Patent Owner suggest that the '854 Patent specification uses these words in an uncommon way. POPR, 15-16. Patent Owner proposes that the unambiguous ordinary meaning of "coefficient of friction" should be narrowed by specifying a particular ASTM standard for measuring the

coefficient. Patent Owner's request is an invitation to reversible legal error.

"Absent clear lexicography or disclaimer…, [the Board] cannot import [a] limitation into the claims." *Retractable Techs. v. Becton, Dickinson & Co*., 659 F.3d 1369, 1372–73 (Fed. Cir. 2011). "Both exceptions require a clear and explicit statement by the patentee." *Thorner v. Sony Comput. Entm't Am. LLC*, 669 F.3d 1362, 1367–68 (Fed. Cir. 2012). Clear lexicography or disclaimer is plainly lacking here. Patent Owner incorrectly asserts that the "'854 patent explicitly **defines** the claimed coefficient of friction ("CoF") as being demonstrated using a specific ASTM standard." POPR, 2; *see also* POPR 16 ("defines"), 47 ("[t]he '854 patent specifies that coefficient of friction is to be 'determined using the American Society for Testing and Materials International (ASTM) Coefficient of Friction ASTM D1894 standard test method (July, 2023).'"). In doing so, Patent Owner conspicuously ignores that the cited passage actually describes the ASTM D1894 standard as an example that "*may be*" used in calculating coefficient of friction: "The coefficient of friction between surfaces of the mesh material 46 and the slide surface 18 ***may be*** determined using the American Society for Testing and Materials International (ASTM) Coefficient of Friction ASTM D1894 standard test method (July, 2023), which may be used to determine both kinetic (moving) and static (starting) coefficient of friction of one surface being dragged across another." EX1001, 11:31-38 (emphasis added). The '854 Patent's permissive language is

woefully deficient, and in fact the opposite, of a "clear and explicit" lexicography or disclaimer. *Thorner,* 669 F.3d 1367-68. Patent Owner fails to identify any support in the '854 Patent for narrowing the claim term to require determination using this specific test protocol, and there is none.

To be clear, no construction is necessary to resolve invalidity given the overlap between the '854 patent and the prior art of Grounds 1A-2B. But even if Patent Owner's improperly narrow interpretation of "coefficient of friction" were applied to require determination by ASTM D1894 (which would be legal error), the Petition demonstrates the broad claimed range of coefficient values would have been obvious to a POSITA. The '854 patent itself confirms the breadth of the recited range of the "coefficient of friction," including even coefficients common to "typical" dry slides. UATP-1001, 1:48-51. The Petition demonstrates the POSITA's motivation to implement a low coefficient of friction to achieve known benefits. Pet., 1-5, 26-32, 68-71; UATP-1003, [0105]-[0116]. Indeed, Phillips describes a desire for low friction interactions between the slide surface and ride vehicle, prompting a POSITA to implement a coefficient of friction well below what is "typical" of dry slides, and within the claimed range. *Id.* Moreover, Fallgatter confirms that a range of low frictional coefficients was recognized as desirable for a recreational slide. Pet., 68-71; UATP-1003, [0221]-[0230]. A POSITA would have been motivated by Phillips' and Fallgatter's teachings to

pursue low-friction interactions between the slide and vehicle and, using conventional low-friction materials taught by Phillips, would have predictably achieved coefficients of friction between the slide surface and ride vehicle falling within the broad claimed range of 0.03-0.2.

A POSITA would have understood that use of conventional low-friction materials described by Phillips (such as Teflon and nylon) would have resulted in coefficients of friction within the claimed range according to any of a variety of testing methodologies, including ASTM D1894. *See* UATP-1003, [0105]-[0116]; UATP-1021, 1; UATP-1026, 5, 7; UATP-1027, 4.

B. "Mesh Layer" (elems. [1b-iii], [22a-iv], [25a-iv])

1. Patent Owner's construction of "mesh layer" improperly injects ambiguity into an otherwise ordinary claim term

The ordinary meaning of the term "mesh" is unambiguous and there is no need to formally construe this term to resolve invalidity. Substitution of the express claim language with PO's narrow interpretation, where there is no support in the '854 patent itself, would be legal error. In an attempt to exclude particular woven fabrics and other materials, Patent Owner contends that the claimed "mesh layer" should be construed to mean "a layer of mesh material which is characterized by open spaces between threads." POPR, 15. Patent Owner, however, does not make any claim as to what dimensions of open spaces qualify a fabric (e.g., a woven fabric) as a mesh under the proposed construction, injecting

unpredictable ambiguity into the claim regarding at what point small open spaces are too small to qualify as a mesh according to Patent Owner.

Here again, while construction is unnecessary to resolve invalidity, the Petition identifies materials that provide a mesh layer even under Patent Owner's interpretation. For example, a POSITA would have appreciated that the materials Phillips lists as durable low-friction materials forming the vehicle bottom were conventionally available as knit or woven fabrics – that is, as meshes even according to Patent Owner's provided definitions. Pet., 23-25, 66-67; UATP-1003, [0103], [0140], [0032]-[0048], [0219]-[0220], [0097]-[0104]; EX2004, 1; EX2006, 1. Further, Patent Owner's provided definitions of 'sheeting' explicitly include knitted or woven fabrics – again, meshes. EX2007, 1; EX2005, 1. Moreover, in Grounds 1B and 2B, WN0400 describes characteristics of a nylon mesh that a POSITA would have appreciated was a suitable option of a nylon for use as the bottom surface of Phillip's vehicle, and is undoubtedly a mesh characterized by open spaces between the threads that closely aligns with the specific mesh layer characteristics recited by the '854 patent's example. Pet., 36-42, 75-82; UATP-1003, [0097]-[0104]; UATP-1006, 1 ("WN0400 – 400 Micron Nylon Mesh 45% Open Area"); *see also* UATP-1003, [0130]-[0133].

Even if Patent Owner's proposed construction of "mesh layer" were adopted, the construction fails to avoid the teachings of the prior art reference

combinations in the petition, which teach ride vehicles with mesh layer bottoms.

II. PATENT OWNER'S CUMULATIVE ASSERTIONS ARE WRONG: A HOLISTIC §325(D) ANALYSIS SUPPORTS INSTITUTION

Phillips and WN0400 were never before the examiner during prosecution. WN0400 discloses information related to commercially available nylon mesh that is unlike any reference previously considered. Pet., 36, 91-95. Phillips is not cumulative of Fallgatter's ride vehicle disclosure, at least because Phillips provides additional details of materials and construction of the slide surface and vehicle that are not contained in Fallgatter. *See e.g.,* UATP-1004, 4:38-5:3, 6:12-30; UATP-1005, [0006]-[0008], [0035]-[0038]. Additionally, Phillips' disclosure of a structured slide/vehicle is not cumulative of '879 Phillips (titled "Pillow Slide") which describes "a sliding apparatus and recreational device convertible from commonplace sleeping expedients" including a pillow for use as a ride vehicle and a comforter or sheet as a sliding surface. UATP-1023, 2:545-57; compare *e.g.,* UATP-1004, 1:13-30; UATP-1023, 4:1-44. A POSITA would have appreciated Phillips disclosure of recreational slides is materially different from unstructured sleeping elements used for sliding in '879 Phillips. *See* UATP-1023, 4:9-10; UATP-1004, 44-46. Fallgatter was never considered in the combinations presented here (Pet. 92-96, 68-70), and as the Petition describes, the examiner erred in allowing claims following Patent Owner's arguments mischaracterizing Fallgatter's description of friction coefficients. Pet., 68-70, 92-94.

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CERTIFICATE OF SERVICE

Pursuant to 37 CFR §§ 42.6(e)(4)(i) *et seq.* and 42.105(b), the undersigned certifies that on February 27, 2025, a complete and entire copy of this Petitioner's Reply to Patent Owner's Preliminary Response was provided by email, to the Patent Owner, by serving the correspondence address of record as follows:

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