

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

DYSON TECHNOLOGY LIMITED AND DYSON, INC.,
Petitioners,

v.

OMACHRON INTELLECTUAL PROPERTY INC.,
Patent Owner.

Case No. IPR2024-00670

U.S. PATENT NO. 8,607,407

**PETITIONERS' REPLY TO
PATENT OWNER'S PRELIMINARY RESPONSE**

PO seeks to construe “door” to require it “swing[] or slide[] to open” and that “a door is not something that must be entirely removed to open.” Paper No. 7 at 12, 18–19. This is contrary to the intrinsic and extrinsic record and should be rejected.

A. The Intrinsic Record Does Not Support PO's Construction

PO does not cite to any intrinsic evidence for its construction, and nothing in the intrinsic record supports limiting the term “door” to a structure that “swings or slides to open,” or prohibits “something that must be entirely removed to open.”

The claims contradict PO's construction: nothing in the claims requires a door to “swing[] or slide[] to open,” and dependent claim 10 recites a “pivotally mounted” door, indicating that “door” on its own does not require a pivotable mounting. Ex1001 at Claim 10. Further, PO's argument that the term “door” excludes “something that must be entirely removed to open,” is directly contradicted by the claims: dependent claim 9 states that “the door is removable.” Ex1001 at Claim 9.

The specification likewise does not support, and instead contradicts, PO's construction: it states that “[t]he door may be openably mounted to the cyclone unit or another portion of vacuum cleaner 100 *by any means*”—expressly allowing for means other than pivoting or sliding, and including removal in its entirety. Ex1001 at 7:8–10. It further states that “[i]n some examples, the door is removable” and that “openable door 158 may be removed from vacuum cleaner 100 by a user.” *Id.* at 2:33–34, 7:33–35. The specification describes pivotably mounted doors as

“examples,” and nothing in the specification or the prosecution history supports limiting the door to one that must “swing[] or slide[] to open.” *Id.* at 7:14–40.

B. The Extrinsic Evidence Does Not Support PO's Construction

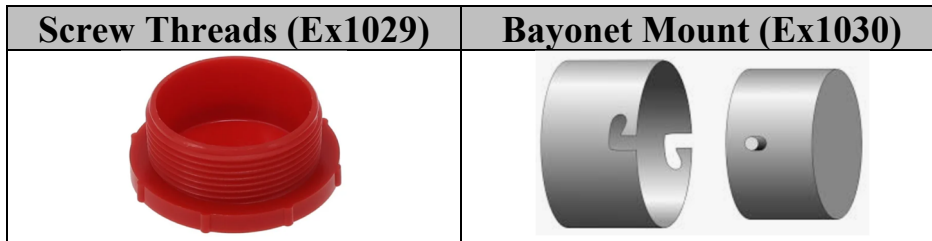
PO cites a single dictionary definition stating that doors “usually” swing or slide to open. Paper 7 at 22. This does not support PO's construction: it states that doors “usually” swing or slide open, not that a door *must* swing or slide open. PO's own definition allows for a “door”—such as the below “[c]rawlspace door”—that has “no hinges” “[n]o latch” and opens by removal by pulling both handles:



Ex1031. Further, even if PO's definition did support its construction (it does not), it cannot contradict or overcome the intrinsic evidence that a “door” is not limited to a structure that swings or slides, or prohibits opening by removal.

Other extrinsic evidence contradicts PO's construction. The sole named inventor of the '407 Patent, Wayne Conrad, is also a named inventor on several vacuum patents that describe doors that do not “swing[] or slide[] to open.” For example, Mr. Conrad's '034 Patent states that an “openable end 193 may comprise a door” that “*may [be] held in place by a friction fit and is therefore removed with a force that overcomes the friction force.*” Ex1025 at 14:23–30 (emphasis added). In “another embodiment, *the openable end 193 may be rotatably mounted (e.g.,*

screw threads or a bayonet mount)” Id. at 14:30–32 (emphasis added); see also Ex1029 (depicting screw threads); Ex1030 (depicting a bayonet mount). Neither screw thread or a bayonet mount require swinging or sliding, or prohibit opening by removal:



Mr. Conrad’s ’849 Patent states that “door 184 may be openable in any manner known in the art. For example, ... the openable door 184 [can be] axially removabl[e] (e.g., detachable) from the housing body 104.” Ex1026 at 23:22–25, Fig. 8. Mr. Conrad’s ’391 Patent likewise describes a “front door 216 [that] can be openably connected (e.g., pivotally openable *or removably mounted*) ... using any suitable mechanism,” and that a door can be opened by detachment: “[i]n the embodiment of Figs. 1-8, the front *door 216 can be opened by detaching it from the cyclone and dirt chamber sidewalls* ... and is secured in the closed position by a friction fit when connected[.]” Ex1027 at 32:27–37 (emphasis added).

PO’s own expert’s testimony contradicts its construction. PO’s technical expert in the co-pending litigation, Mr. Glenn Akhavein, testified he was “certain” that “there probably are” other ways to attach a door to a vacuum other than a hinge and that “there’s lots of ways to do lots of things” Ex1028 at 118:21–119:5.

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Respectfully submitted,

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LIST OF EXHIBITS

Exhibit No.	Description
Ex1001	U.S. Patent No. 8,607,407 (“407 Patent”)
Ex1002	Declaration of Robert Giachetti
Ex1003	<i>Curriculum Vitae</i> of Robert Giachetti
Ex1004	File History of U.S. 8,607,407 (App. No. 12/720,484)
Ex1005	U.S. Patent Publication No. 2007/0209335 to Conrad (“Conrad335”)
Ex1006	U.K. Patent Publication No. GB283,179 to Inventia Patent-Verwertungs-Gesellschaft (“IPVG”)
Ex1007	French Patent No. 497,856 to Aktiebolaget Lux (“Lux”)
Ex1008	U.S. Patent No. 2,149,135 to Eriksson-Jons (“Eriksson-Jons”)
Ex1009	French Patent No. 1,094,603 to Martelliere (“Martelliere”)
Ex1010	Certified English translation of French Patent No. 1,094,603 to Martelliere (“Martelliere”)
Ex1011	Canadian Patent No. 161,428 to Robinson (“Robinson”)
Ex1012	Chinese Patent Publication No. 101,061,932 to Jianan (“Jianan”)
Ex1013	Certified English translation of Chinese Patent Publication No. 101,061,932 to Jianan (“Jianan”)
Ex1014	U.S. Patent Publication No. 2006/0156508 to Khalil (“Khalil”)
Ex1015	U.S. Publication No. 2008/0040883 (“Beskow”)
Ex1016	International Publication No. WO 02/067753 to Vuijk (“Vuijk”)
Ex1017	Ex. C-1 to Plaintiffs’ Infringement Contentions in <i>SharkNinja Operating LLC v. Dyson, Inc.</i> , No. 1:23-cv-12372 (D. Mass.)
Ex1018	Swiss Patent No. CH203,675 to Peter (“Peter”)

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Ex1019	Certified English translation of Swiss Patent No. CH203,675 to Peter ("Peter")
Ex1020	PCT Publication No. 2007/084543 to Butler et al. ("Butler")
Ex1021	Plaintiffs' Infringement Contentions in <i>SharkNinja Operating LLC v. Dyson, Inc.</i> , No. 1:23-cv-12372 (D. Mass.)
Ex1022	The Parties' Revised Proposed Schedule in <i>SharkNinja Operating LLC v. Dyson, Inc.</i> , No. 1:23-cv-12372 (D. Mass.)
Ex1023	https://www.uscourts.gov/sites/default/files/data_tables/fcms_na_distprofile1231.2023.pdf
Ex1024	Petitioners' Stipulation
Ex1025	U.S. Patent No. 11,529,034 to Conrad ("'034 Patent")
Ex1026	U.S. Patent No. 11,992,849 to Conrad ("'849 Patent")
Ex1027	U.S. Patent No. 10,159,391 to Brown et al. ("'391 Patent")
Ex1028	Transcript of Deposition of Dr. Glenn Akhavein (June 12, 2024)
Ex1029	Screw Threads (https://www.aliexpress.com/i/3256805159501218.html?gatewayAdapt=4itemAdapt)
Ex1030	Bayonet Mount (https://en.wikipedia.org/wiki/Bayonet_mount)
Ex1031	Crawlspace Door (https://cathmer.com/products/cathmer-crawlspace-door-overlay-install-16x33)

CERTIFICATE OF SERVICE

The undersigned hereby certifies that a complete copy of the foregoing document was served on July 31, 2024 on counsel of record for the Patent Owner via email to the following address: GDC-SharkNinjaIPRD@gibsondunn.com

/s/ Sheryl A. Brongiel
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