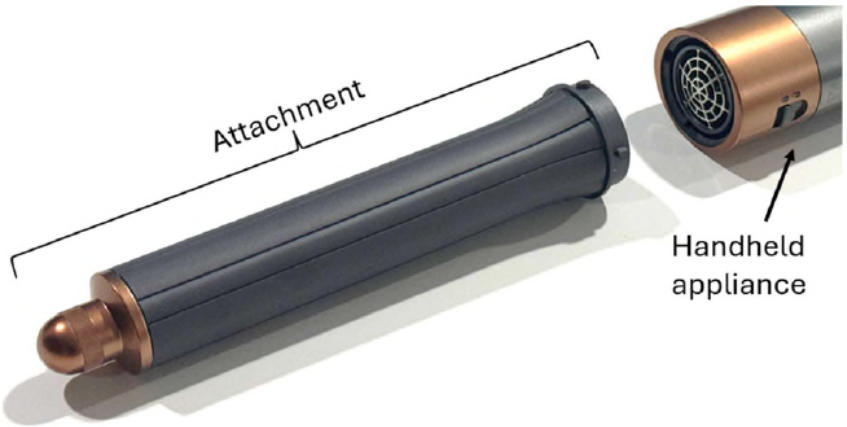
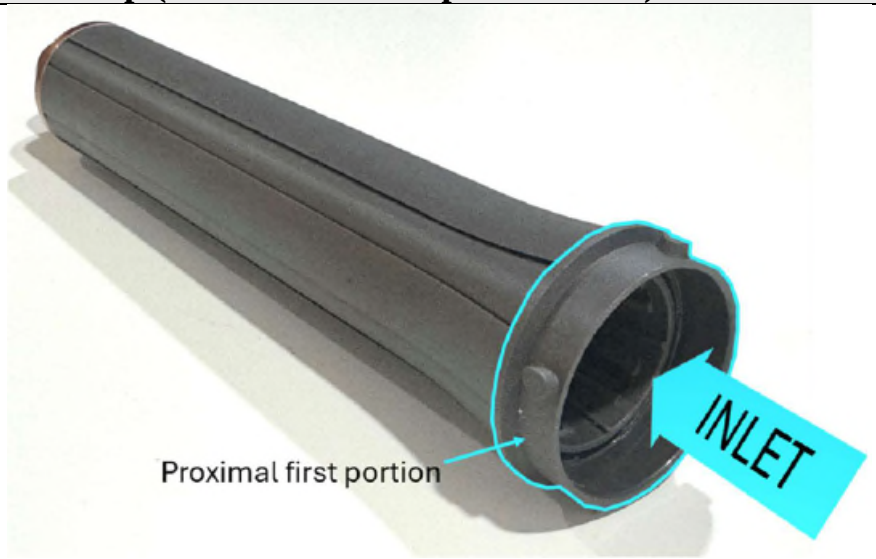
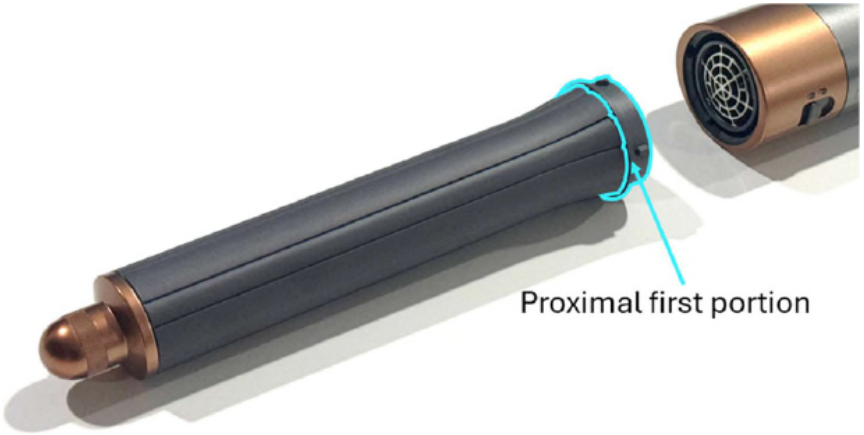
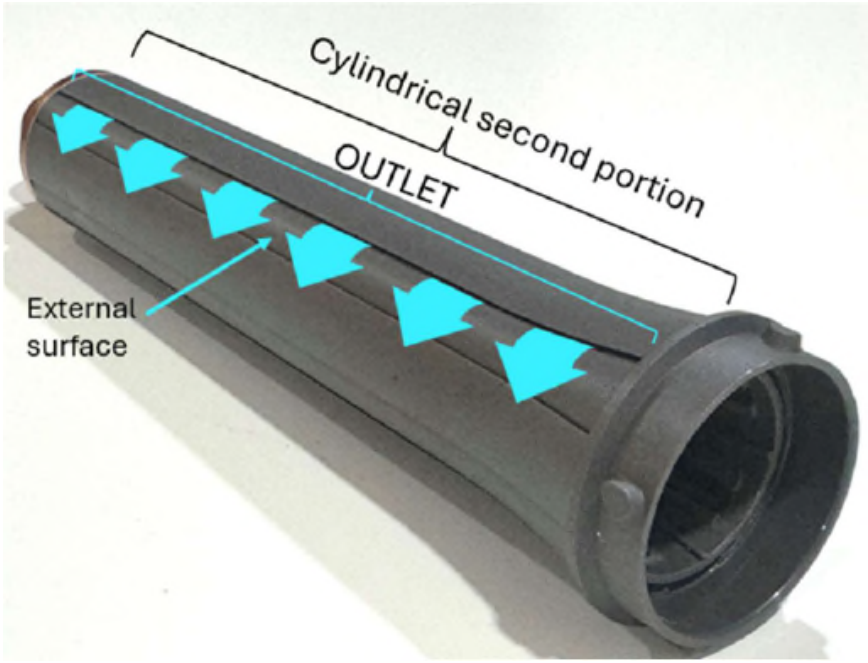
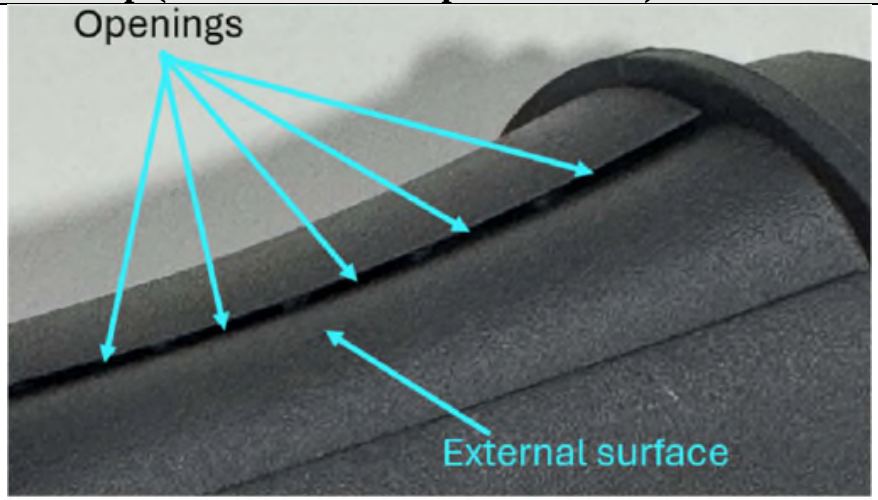
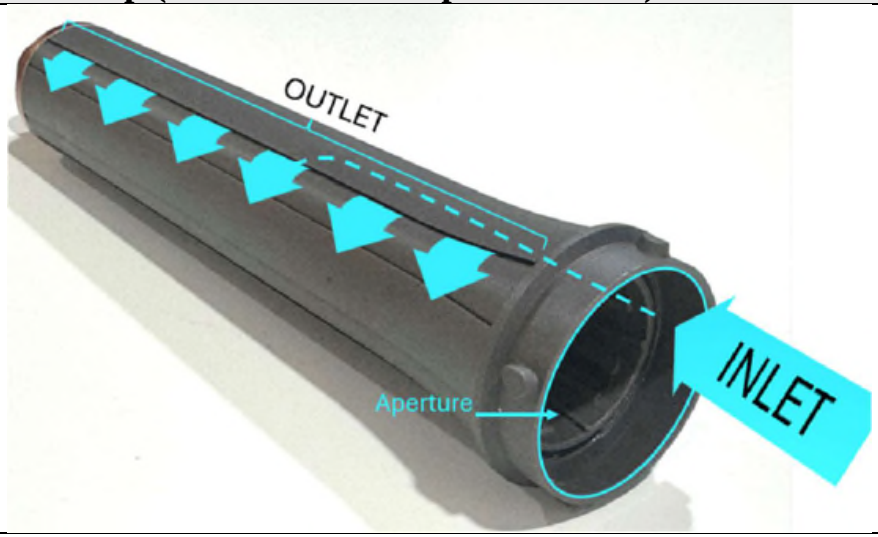
LIMITATION-BY-LIMITATION ANALYSIS OF PO'S AIRWRAP (MODEL HS05 – Tapered Barrel)

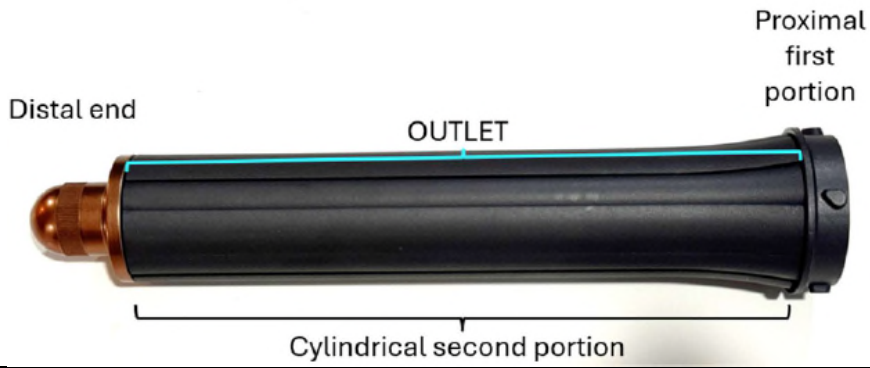
Claim Limitation	Airwrap (Model HS05 – Tapered Barrel)
1[pre] An attachment for a hand held appliance comprising	The Airwrap includes an attachment (i.e., the curler attachment) for a handheld appliance, in particular a hair care appliance such as a hot styling appliance. As shown below, the Airwrap includes a handle and a detachable head or attachment which attaches at the distal end of the handle to the fluid inlet of the attachment. 
1[a] an inlet in a proximal first portion of the attachment;	The Airwrap includes an inlet in a proximal first portion of the attachment. As shown below, the Airwrap curler attachment includes an inlet to the attachment at an open aperture at the proximal end.

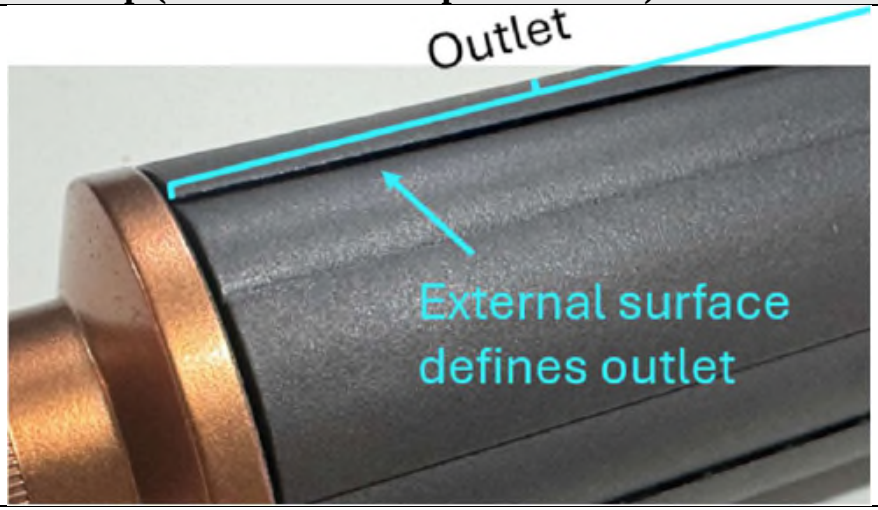
Claim Limitation	Airwrap (Model HS05 – Tapered Barrel)
	 

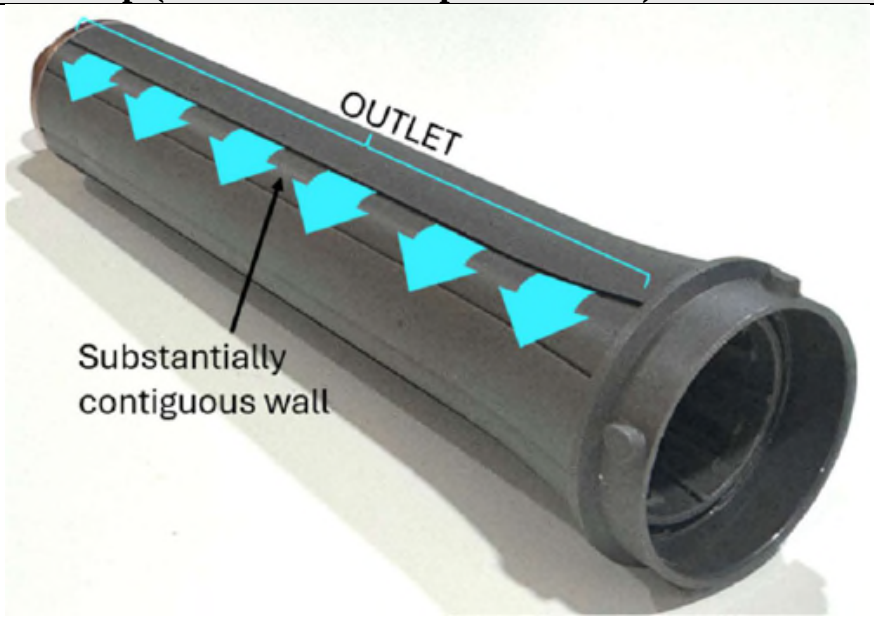
Claim Limitation	Airwrap (Model HS05 – Tapered Barrel)
1[b] an outlet in a cylindrical second portion of the attachment; and	The Airwrap curler attachment includes a fluid (i.e., air) outlet in a cylindrical second portion of the attachment. The outlet consists of at least one outlet, and in the alternative six outlets for air, each outlet being in a cylindrical second portion of the attachment. 

Claim Limitation	Airwrap (Model HS05 – Tapered Barrel)
	
1[c] a fluid flow path between the inlet and the outlet,	The Airwrap includes an inlet within the attachment allowing fluid drawn into the fluid flow path within the handle by the fan unit to flow into the inlet, the aperture in the first proximal end of the attachment, and out of the outlet in the sides of the attachment.

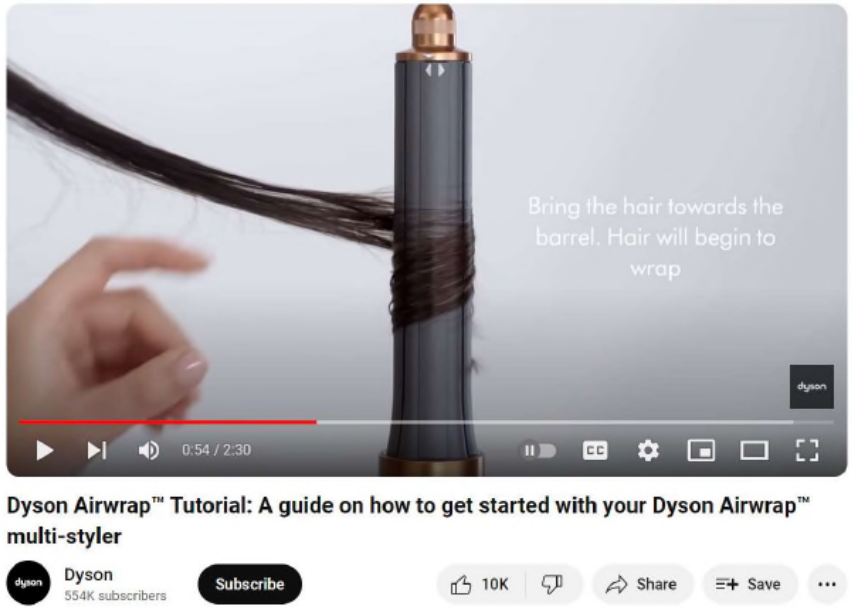
Claim Limitation	Airwrap (Model HS05 – Tapered Barrel)
	
1[d] wherein the outlet in the cylindrical second portion of the attachment comprises at least one slot extending continuously from the proximal first portion to a distal end of the attachment,	As shown below, the Airwrap includes an outlet in the cylindrical second portion of the attachment that comprises at least one slot extending continuously from the proximal first portion to a distal end of the attachment. The outlet comprises a slot which also has spacers provided along the length of the slot. A POSITA would understand that this can constitute a single slot. The spacers perform the purpose of maintaining the gap between the adjacent plates forming the slot or thickness of the slot, thereby allowing a more even air flow. See, e.g., EX1001, 3:7-14, 7:24-29; FIGS. 3a, 3b.

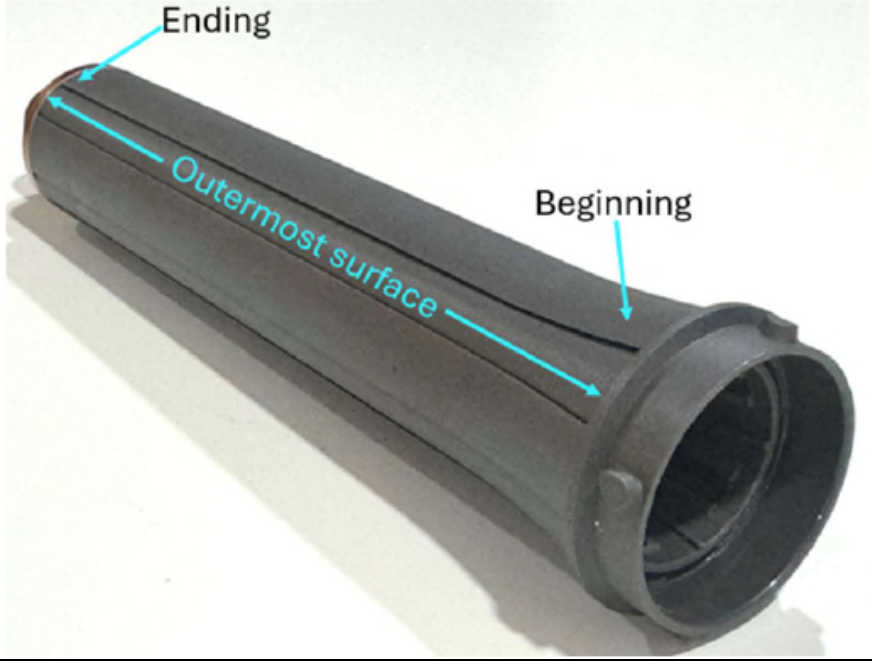
Claim Limitation	Airwrap (Model HS05 – Tapered Barrel)
	
1[e] wherein the outlet is at least partially defined by an external surface of a substantially contiguous wall of the attachment	The Airwrap includes a fluid outlet which is at least partially defined by an external surface of a substantially contiguous wall of the attachment. This arrangement enables fluid (i.e., air) to exit the attachment all the way around the attachment and along the length of the attachment maximizing a hair styling region of the product.

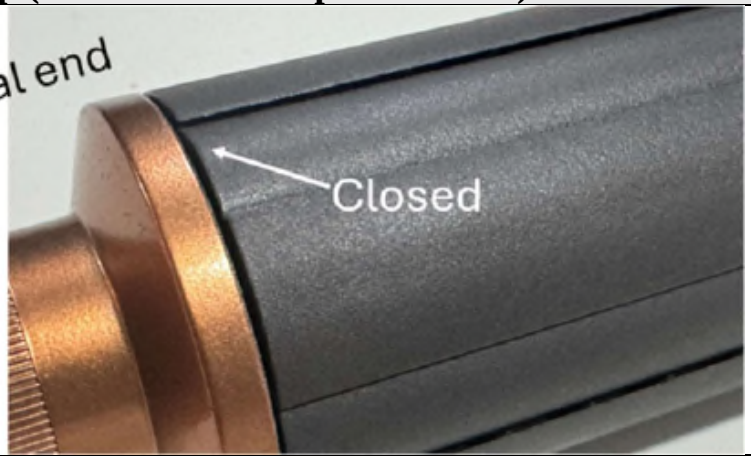
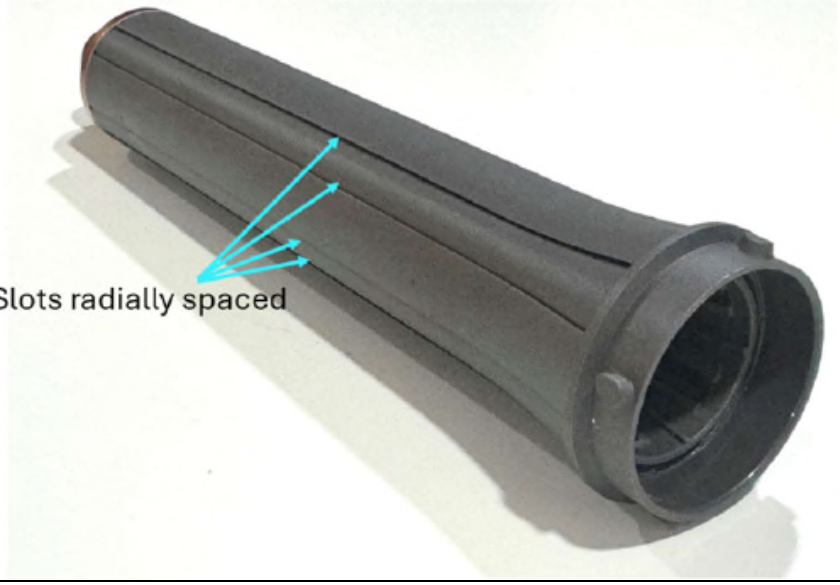
Claim Limitation	Airwrap (Model HS05 – Tapered Barrel)
	
1[f] and is configured to direct fluid flow emitted from the outlet tangentially along and around the external surface of the substantially contiguous wall to form a circumferential fluid flow around the cylindrical second portion of the attachment that encourages hair to automatically wrap around the cylindrical second portion,	The Airwrap practices this limitation. The fluid flowing out of the slots is tangential to the outer surface of the Airwrap plate and joins with the fluid flowing out of the other slots of the fluid outlet forming a fluid flow around the circumference of the attachment. Thus, the fluid is blown out along the external surface of the attachment and this encourages hair to wrap around the attachment automatically. The fluid exiting the outlet is attracted to the curved surface of the attachment by the Coanda effect. This in turn causes hair that is presented to the attachment to automatically wrap around the surface to style into curls.

Claim Limitation	Airwrap (Model HS05 – Tapered Barrel)
	 The configuration of the outlet is critical to the creation of the Coanda effect. The fact that hair automatically wraps around the cylindrical second portion (as shown in the video above) is evidence that the outlet is in fact configured to direct fluid flow emitted from the outlet tangentially along and around the external surface of the substantially contiguous wall to form a circumferential fluid flow around the cylindrical second portion of the attachment.

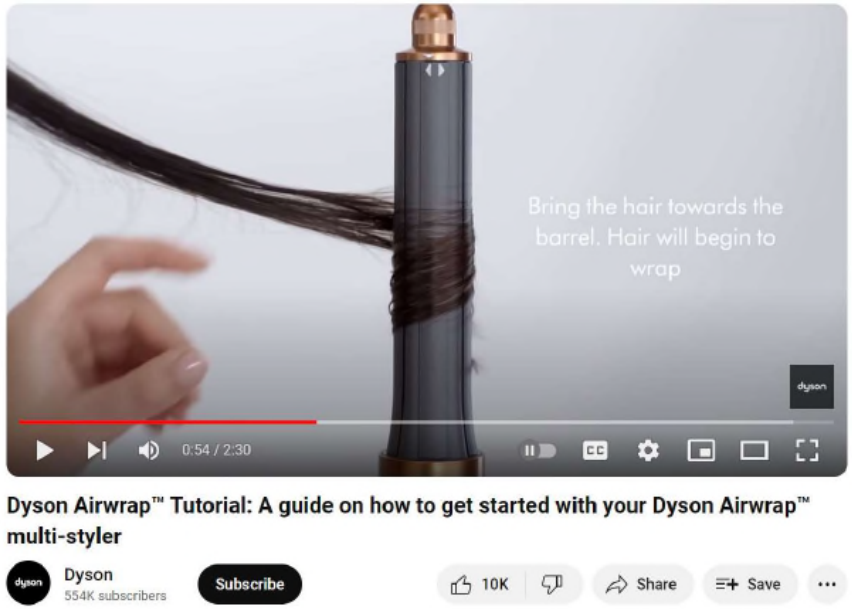
Claim Limitation	Airwrap (Model HS05 – Tapered Barrel)
	 EX2075 (https://www.dyson.com/hair-care/hair-stylers/airwrap/complete-long-nickel-copper).

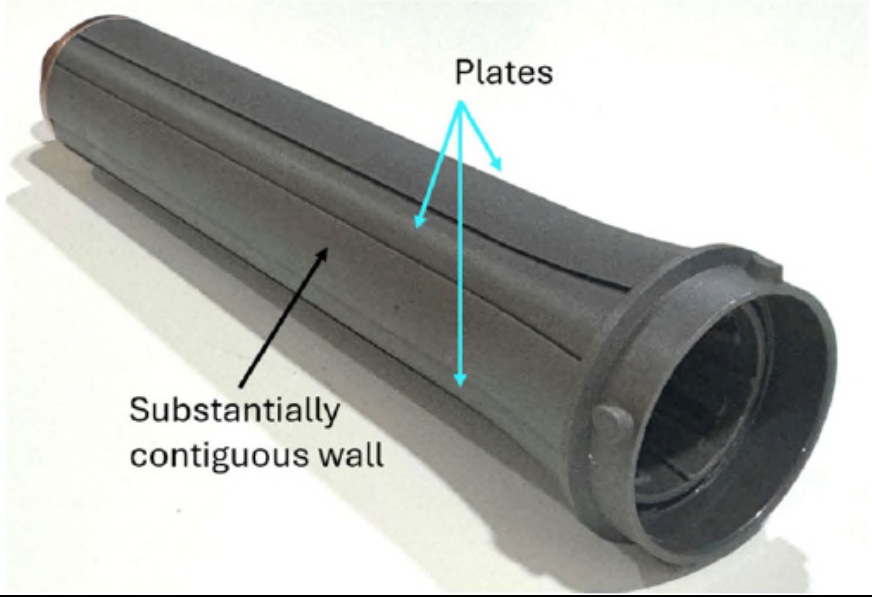
Claim Limitation	Airwrap (Model HS05 – Tapered Barrel)
	 EX2074 (https://www.youtube.com/watch?v=5Auip2NyP8A).
1[g] wherein the external surface of the substantially contiguous wall is an outermost surface of the attachment along an entire length of the attachment from a beginning of the at least one slot to an end of the at least one slot,	As shown below, the Airwrap includes an outermost surface along the entire length of the attachment from the beginning of each slot to the end of each slot. This arrangement enables the air to flow onto and across the outermost surfaces to help guide the hair.

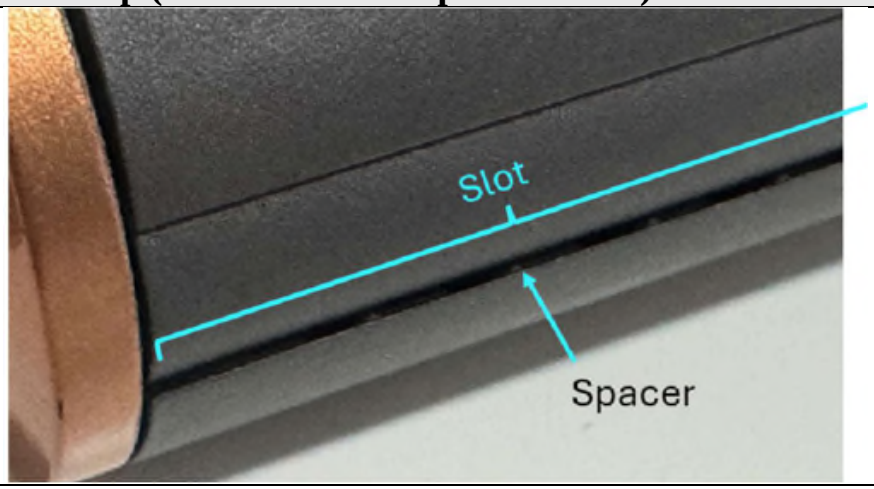
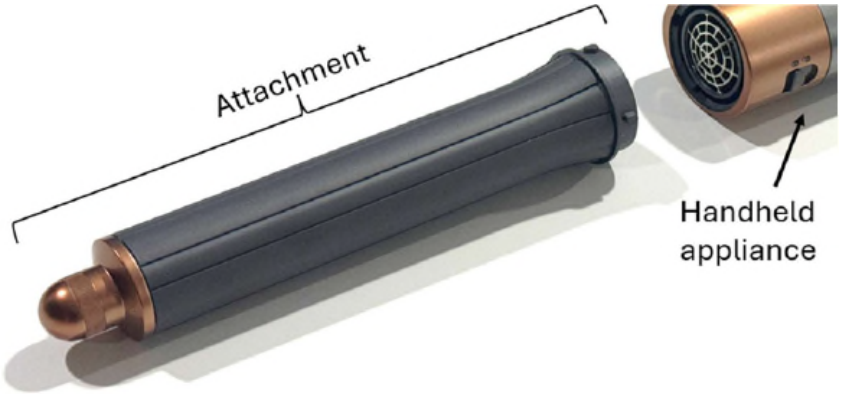
Claim Limitation	Airwrap (Model HS05 – Tapered Barrel)
	
1[h] and wherein the distal end of the attachment is closed.	As shown below, the distal end of the Airwrap curler attachment is closed to the airflow.

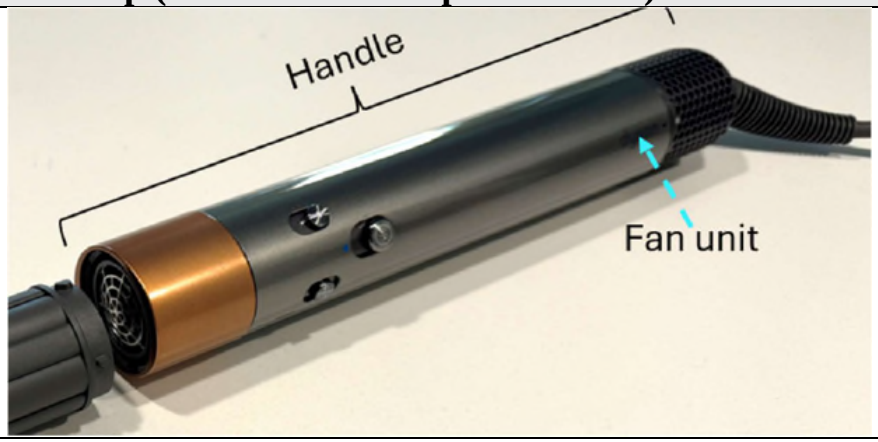
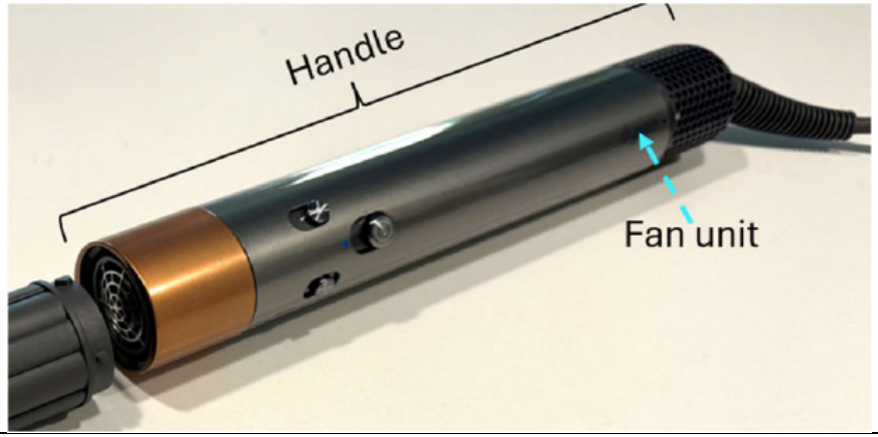
Claim Limitation	Airwrap (Model HS05 – Tapered Barrel)
	
2. The attachment of claim 1, wherein the outlet comprises a plurality of slots radially spaced around the attachment.	As shown below, the Airwrap includes a plurality of slots radially spaced around the attachment. 

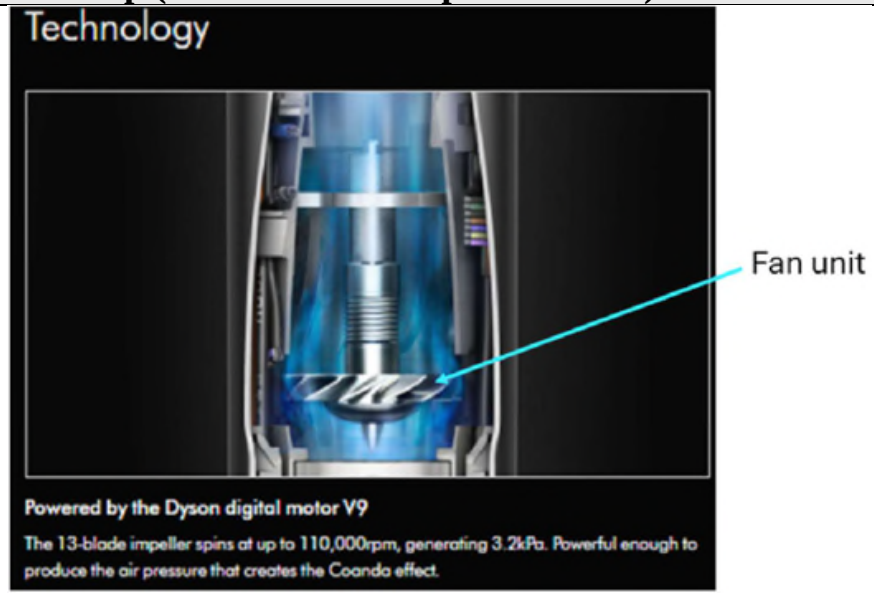
Claim Limitation	Airwrap (Model HS05 – Tapered Barrel)
3. The attachment of claim 1, wherein the attachment is configured so that, in use, the fluid emitted from the outlet is attracted to the external surface of the attachment.	As shown below, the Airwrap curler attachment is configured so that, in use, the fluid emitted from the outlet is attracted to the external surface of the attachment (e.g., Coanda effect). EX2075 (https://www.dyson.com/hair-care/hair-stylers/airwrap/complete-long-nickel-copper).

Claim Limitation	Airwrap (Model HS05 – Tapered Barrel)
	 EX2074 (https://www.youtube.com/watch?v=5Auip2NyP8A).
14. The attachment of claim 1, wherein the wall comprises a plurality of plates.	As shown below, the Airwrap includes a wall comprised of a plurality of plates.

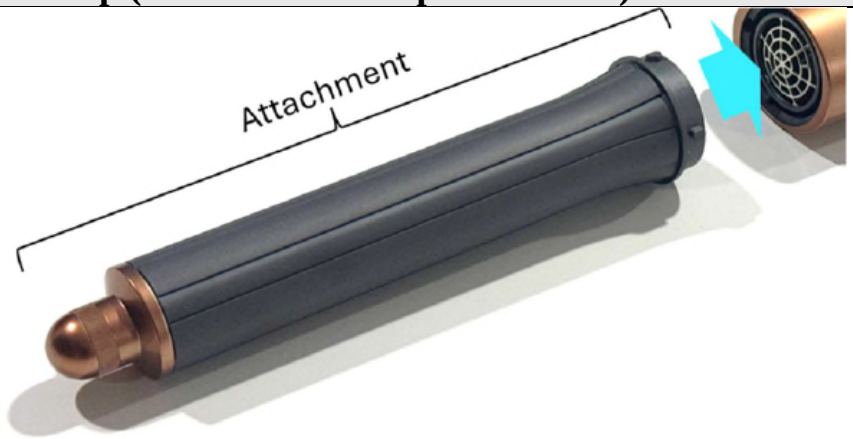
Claim Limitation	Airwrap (Model HS05 – Tapered Barrel)
	
15. The attachment of claim 1, wherein the at least one slot is formed by a gap between adjacent sections of the wall that are joined by at least one spacer disposed between the beginning of the at least one slot and the end of the at least one slot to maintain the gap.	As shown below, the Airwrap includes a slot with spacers longitudinally spaced along the slot and plate, provided to maintain each slot size.

Claim Limitation	Airwrap (Model HS05 – Tapered Barrel)
	
17[pre] A hand held appliance comprising	The Airwrap includes a hand held appliance. See analysis related to claim element 1[pre], incorporated here by reference. 
17[a] a handle having a fluid flow path from a handle inlet to a handle outlet,	As shown below, the Airwrap includes a handle having a fluid (i.e., air) flow path from a handle inlet to a handle outlet.

Claim Limitation	Airwrap (Model HS05 – Tapered Barrel)
	
17[b] a fan unit for drawing fluid into the handle inlet,	As shown below, the Airwrap includes a fan unit for drawing fluid into the handle inlet. This fan unit moves air from the handle inlet to the handle outlet. 

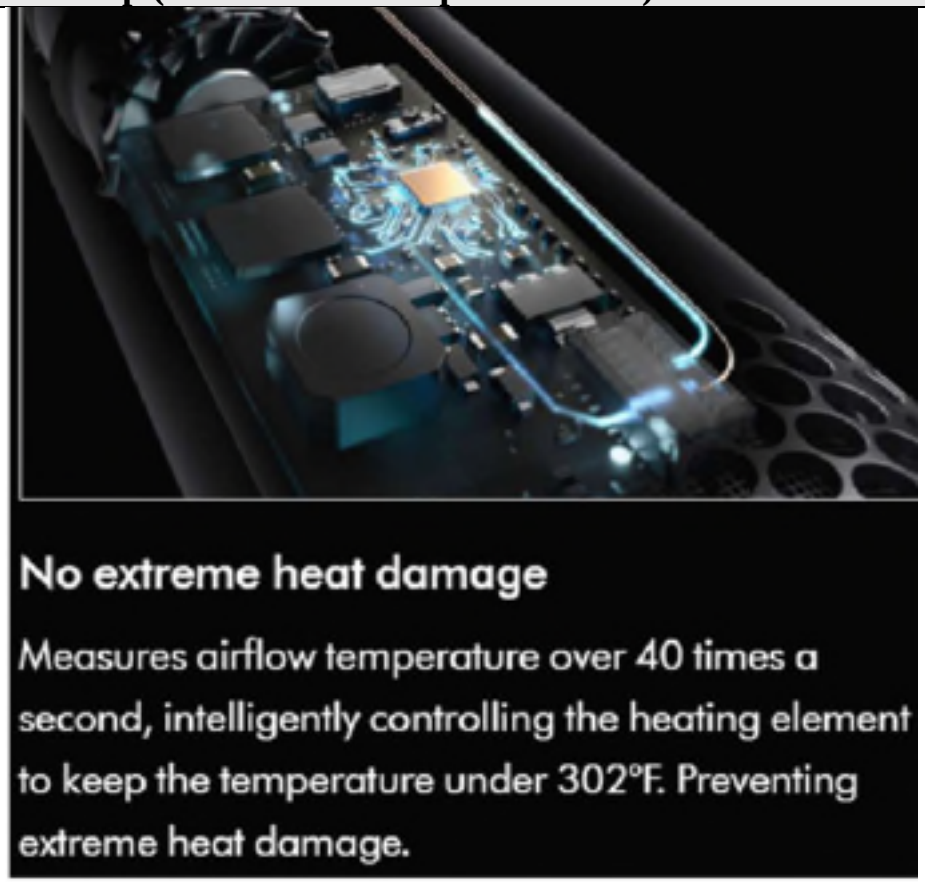
Claim Limitation	Airwrap (Model HS05 – Tapered Barrel)
	 EX2076 (https://www.dyson.com/hair-care/hair-stylers/airwrap).

Claim Limitation	Airwrap (Model HS05 – Tapered Barrel)
	 Airflow speed Three precise airflow speeds to suit your styling. EX2075 (https://www.dyson.com/hair-care/hair-stylers/airwrap/complete-long-nickel-copper)
17[c] and an attachment for attaching to the handle,	As shown below, the Airwrap includes an attachment (i.e., the curler attachment) for attaching to the handle. See analysis related to claim element 1[pre], incorporated here by reference.

Claim Limitation	Airwrap (Model HS05 – Tapered Barrel)
	
17[d] the attachment comprising an inlet in a proximal first portion of the attachment;	See analysis related to claim element 1[a], incorporated here by reference.
17[e] an outlet in a cylindrical second portion of the attachment;	See analysis related to claim element 1[b], incorporated here by reference.
17[f] and a fluid flow path between the inlet and the outlet,	See analysis related to claim element 1[c], incorporated here by reference.
17[g] wherein the outlet in the cylindrical second portion of the attachment comprises at least one slot extending continuously from the proximal first portion to a distal end of the attachment,	See analysis related to claim element 1[d], incorporated here by reference.
17[h] wherein the outlet is at least partially defined by an external surface of a substantially contiguous wall of the attachment	See analysis related to claim element 1[e], incorporated here by reference.

Claim Limitation	Airwrap (Model HS05 – Tapered Barrel)
17[i] and is configured to direct fluid flow emitted from the outlet tangentially along and around the external surface of the substantially contiguous wall to form a circumferential fluid flow around the cylindrical second portion of the attachment that encourages hair to automatically wrap around the cylindrical second portion,	See analysis related to claim element 1[f], incorporated here by reference.
17[j] wherein the external surface of the substantially contiguous wall is an outermost surface of the attachment along an entire length of the attachment from a beginning of the at least one slot to an end of the at least one slot,	See analysis related to claim element 1[g], incorporated here by reference.
17[k] and wherein the distal end of the attachment is closed.	See analysis related to claim element 1[h], incorporated here by reference.
18. The appliance of claim 17, wherein the outlet comprises a plurality of slots radially spaced around the attachment.	See analysis related to claim 2, incorporated here by reference.
19. The appliance of claim 17, wherein the attachment is configured so that, in use, the	See analysis related to claim 3, incorporated here by reference.

Claim Limitation	Airwrap (Model HS05 – Tapered Barrel)
fluid emitted from the outlet is attracted to the external surface of the attachment.	
30. The appliance of claim 17, wherein the appliance is a hair care appliance.	See analysis related to claim element 1[pre], incorporated here by reference.
31. The appliance of claim 17, wherein the appliance is a hot styling appliance.	As shown below, the Airwrap includes the appliance of claim 17, wherein the appliance is a hot styling appliance.

Claim Limitation	Airwrap (Model HS05 – Tapered Barrel)
	 EX2076 (https://www.dyson.com/hair-care/hair-stylers/airwrap).