

Patent Owner's Demonstrative Slides

CONTAINS CONFIDENTIAL INFORMATION SUBJECT TO PROTECTIVE ORDER

IPR2024-00083
U.S. Patent No. 11,465,005
February 18, 2025

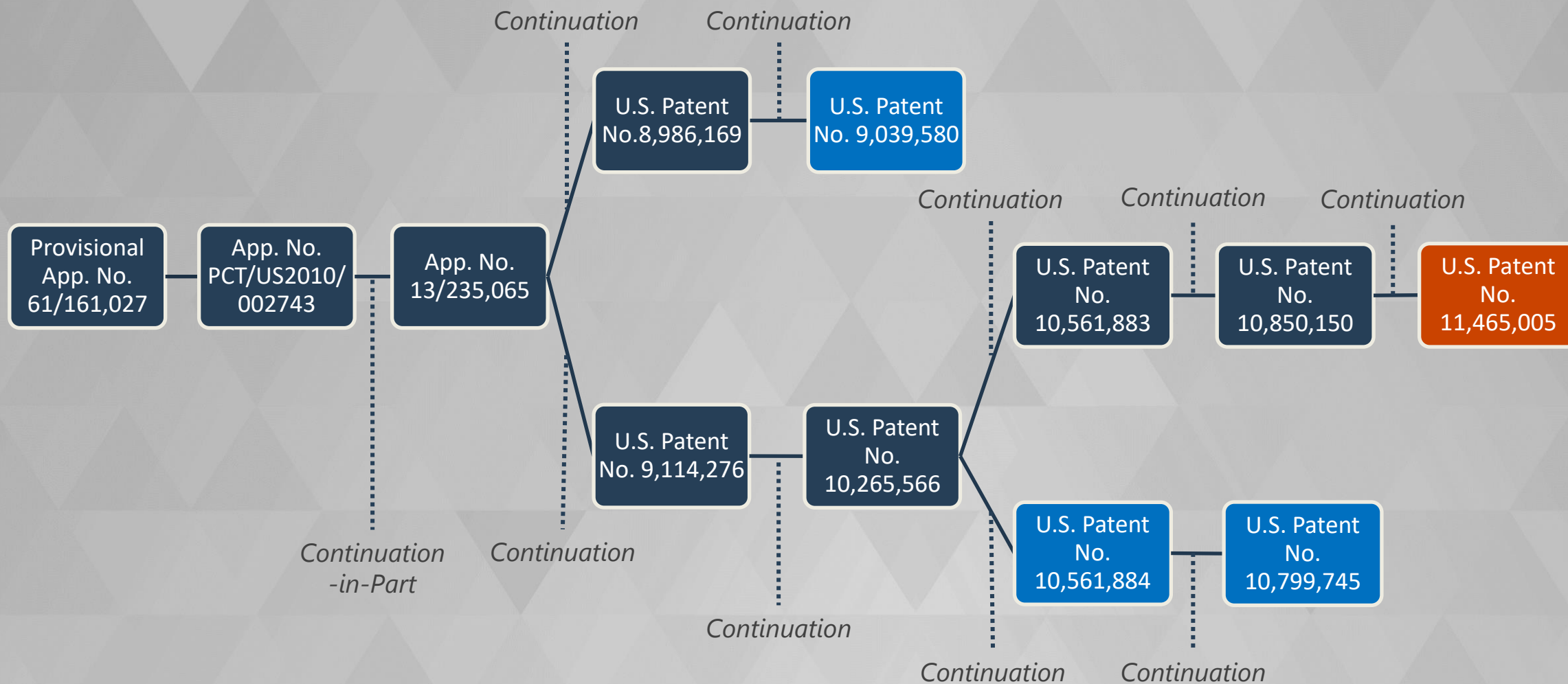
EX2089
Woodway USA, Inc.
IPR2024-00083

Lack of Jurisdiction

LifeCORE Fitness, Inc. Lacked Capacity to File the Petition

- Jurisdictional questions are ripe.
 - *See Henderson v. Shinseki*, 562 U.S. 428, 434 (2011) (Courts “must raise and decide jurisdictional questions”).
- At the time the Petition was filed, LifeCORE Fitness, Inc. did not exist. Petitioner’s misstep is jurisdictional.
 - The Institution Decision is incorrect in concluding that 35 U.S.C. § 311(a) is not jurisdictional.
 - Analogizing to § 312(a)(2) and *Lumentum Holdings, Inc. v. Capella Photonics, Inc.*, IPR2015-00739, Paper 38, 4–5 (PTAB Mar. 4, 2016) (precedential) is reversible error.

The Challenged Patent



U.S. Patent No. 11,465,005

Filed: November 30, 2020

14 Challenged Claims

- claims 1-4, 6-13, and 15-16

(54) MANUALLY POWERED TREADMILL

US011465005B2

(12) **United States Patent**
Bayerlein et al.

(10) Patent No.: **US 11,465,005 B2**
(45) Date of Patent: ***Oct. 11, 2022**

(54) **MANUALLY POWERED TREADMILL**

(71) Applicant: **Woodway USA, Inc.**, Waukesha, WI (US)

(72) Inventors: **Douglas G. Bayerlein**, Oconomowoc, WI (US); **Vance E. Emons**, Hartland, WI (US); **Nicholas A. Oblanski**, Waukesha, WI (US); **Scott D. Hoerig**, Brookfield, WI (US); **Matthew J. Zank**, Milwaukee, WI (US); **Robert L. Zimpel**, Menomonee Falls, WI (US); **Joel W. Richards**, Wauwatosa, WI (US)

(73) Assignee: **Woodway USA, Inc.**, Waukesha, WI (US)

(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 110 days.
This patent is subject to a terminal disclaimer.

(21) Appl. No.: **17/247,101**

(22) Filed: **Nov. 30, 2020**

(65) **Prior Publication Data**
US 2021/0077846 A1 Mar. 18, 2021

Related U.S. Application Data

(63) Continuation of application No. 16/792,444, filed on Feb. 17, 2020, now Pat. No. 10,850,150, which is a (Continued)

(51) **Int. Cl.**
A63B 21/005 (2006.01)
A63B 22/00 (2006.01)
(Continued)

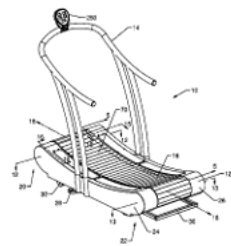
(52) **U.S. Cl.**
CPC **A63B 21/0053** (2013.01); **A63B 21/0054** (2015.10); **A63B 21/0055** (2015.10);
(Continued)

(58) **Field of Classification Search**
CPC A63B 22/02-0228; A63B 22/0285-0292
See application file for complete search history.

(56) **References Cited**
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8,308 A 8/1851 Seymour
26,914 A 1/1860 Meldrum
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CN 3201120 9/2001
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(Continued)
OTHER PUBLICATIONS
U.S. Appl. No. 05/616,951, filed Sep. 26, 1975, Schonenberger.
(Continued)
Primary Examiner — Jennifer Robertson
(74) **Attorney, Agent, or Firm** — Foley & Lardner LLP

(57) **ABSTRACT**
A treadmill includes a frame; a rotatable element coupled to the frame; a running belt at least partially supported by the rotatable element; and, a first element and a second element, both of which are coupled to the running belt. The running belt includes a running surface, at least a portion of which is curved. Further, one of the first and second elements and the running belt freely rotate in a first direction of rotation relative to the frame. However, in a second direction of rotation, opposite the first direction of rotation, the one of the first and second elements is substantially prevented from rotation relative to the frame to substantially prevent or resist rotation of the running belt relative to the frame.

17 Claims, 20 Drawing Sheets



(57)

ABSTRACT

A treadmill includes a frame; a rotatable element coupled to the frame; a running belt at least partially supported by the rotatable element; and, a first element and a second element, both of which are coupled to the running belt. The running belt includes a running surface, at least a portion of which is curved. Further, one of the first and second elements and the running belt freely rotate in a first direction of rotation relative to the frame. However, in a second direction of rotation, opposite the first direction of rotation, the one of the first and second elements is substantially prevented from rotation relative to the frame to substantially prevent or resist rotation of the running belt relative to the frame.

U.S. Patent No. 11,465,005

The parties dispute:

- motivation to combine or substitute
- the presence of three claim limitations in the prior art

1. A manually powered treadmill, comprising:
a frame;
at least one front running belt pulley coupled to the frame;
at least one rear running belt pulley coupled to the frame
and spaced a distance from the at least one front
running belt pulley;
a running belt at least partially supported by at least one
of the at least one front running belt pulley and the at
least one rear running belt pulley, wherein the running
belt includes a running surface, at least a portion of
which is curved;
a safety device coupled to the frame and the running belt,
the safety device having a first element and a second
element, the first element substantially surrounding the
second element or the second element substantially
surrounding the first element;
wherein one of the first and second elements of the safety
device and the running belt freely rotate in a first
direction of rotation relative to the frame, however, in
a second direction of rotation, opposite the first direc-
tion of rotation, the one of the first and second elements
is substantially prevented from rotation relative to the
frame to substantially prevent or resist rotation of the
running belt relative to the frame.

9. A treadmill, comprising:
a frame;
a rotatable element coupled to the frame;
a running belt at least partially supported by the rotatable
element, wherein the running belt includes a running
surface, at least a portion of which is curved; and
a first element and a second element, both of which are
coupled to the running belt, and wherein the first
element substantially surrounds the second element or
the second element substantially surrounds the first
element;
wherein one of the first and second elements and the
running belt freely rotate in a first direction of rotation
relative to the frame, however, in a second direction of
rotation, opposite the first direction of rotation, the one
of the first and second elements is substantially pre-
vented from rotation relative to the frame to substan-
tially prevent or resist rotation of the running belt
relative to the frame.

15. A manually powered treadmill, comprising:
a frame;
at least one front running belt pulley coupled to the frame;
at least one rear running belt pulley coupled to the frame
and spaced a distance from the at least one front
running belt pulley;
a running belt at least partially supported by at least one
of the at least one front running belt pulley and the at
least one rear running belt pulley, wherein the running
belt includes a running surface, at least a portion of
which is curved; and
a safety device coupled to the frame and the running belt,
the safety device having an element adapted for rota-
tion relative to the frame in a first direction of rotation
relative to the frame, however, in a second direction of
rotation, opposite the first direction of rotation, the
element is substantially prevented from rotation rela-
tive to the frame to substantially prevent or resist
rotation of the running belt relative to the frame; and
wherein the safety device includes another element,
wherein one of the element and the another element
substantially surrounds the other of the element and the
another element.

U.S. Patent No. 11,465,005

The parties dispute:

- motivation to combine or substitute
- the presence of three claim limitations in the prior art

2. The manually powered treadmill of claim 1, further comprising a front shaft coupled to frame, the front shaft being adapted to support the at least one front running belt pulley.

3. The manually powered treadmill of claim 1, further comprising a rear shaft coupled to frame, the rear shaft being adapted to support the at least one rear running belt pulley.

6. The manually powered treadmill of claim 1, further comprising a plurality of bearings coupled to the frame, at least one bearing of the plurality of bearings configured to at least partially support the running belt.

13. The treadmill of claim 9, further comprising a plurality of bearings coupled to the frame, at least one bearing of the plurality of bearings configured to at least partially support the running belt.

16. The manually powered treadmill of claim 15, further comprising a plurality of bearings coupled to the frame, wherein at least one bearing in the plurality of bearings at least partially supports the running belt.

Level of Ordinary Skill in the Art

Level of Ordinary Skill in the Art

PATENT OWNER'S PROPOSAL

"a bachelor of science degree in mechanical engineering or at least two years of experience in the treadmill industry, including experience and knowledge of the design, construction, testing, and operation of manual treadmills"

PETITIONER'S PROPOSAL

"a bachelor's degree in mechanical engineering and at least one year of machine design experience related to power transmission equipment and a demonstrated understanding of the biomechanics of exercise, including knowledge in the field of anthropometry (i.e., the study of human proportions)"

- Petitioner's proposal is supported by nothing but the *ipse dixit* of Dr. Giachetti and should be rejected as it improperly excludes certain of the named inventors.

That starting point [for how a POSA understands the claims] is based on the well-settled understanding that inventors are typically persons skilled in the field of the invention and that patents are addressed to and intended to be read by others of skill in the pertinent art.

Phillips v. AWH Corp.,
415 F.3d 1303, 1313 (Fed. Cir. 2005).

In the Final Written Decision in other IPRs on related patents, the Board "agree[d] with Patent Owner that...knowledge of exercise biomechanics is not" required for a POSA.

LifeCORE Fitness, LLC d/b/a Assault Fitness v. Woodway USA, Inc.,
IPR2023-00849, Paper 42, 18 (PTAB October 24,
2024) ("849 FWD")

Claim Construction: “substantially prevent[]”
“safety device”

“substantially prevent[]” / “safety device”

The District Court’s constructions* should be adopted:

Term	Construction(s)
“substantially prevents”	“restricts rotation to allow for only one rotational direction of movement,” while allowing for some “degree of possible movement in the second rotational direction (the possibility of an initial swing back of the treadmill) before the safety device function locks in to allow for movement in one direction.” EX1033 at 15-16.
“safety device”	“a device that includes the elements recited [in the claims] and restricts rotation to allow for only one rotational direction of movement or resists rotation in one direction of rotation.” EX1033 at 23.

- District Court’s construction of “substantially prevent[]” in question based on summary judgment ruling, which Patent Owner has appealed.

Claim Construction: “plurality of bearings”

“plurality of bearings”

PATENT OWNER’S INTERPRETATION

“Bearings” are characterized specifically by their relationship to other moving parts, which slide on the bearings, *i.e.*, bearings are positioned below the belt such that the belt slides on the bearings.

6. The manually powered treadmill of claim 1, further comprising a plurality of bearings coupled to the frame, at least one bearing of the plurality of bearings configured to at least partially support the running belt.

13. The treadmill of claim 9, further comprising a plurality of bearings coupled to the frame, at least one bearing of the plurality of bearings configured to at least partially support the running belt.

PETITIONER’S INTERPRETATION

The term does not require one element be located above, or have a weight bearing relationship with, another element.

16. The manually powered treadmill of claim 15, further comprising a plurality of bearings coupled to the frame, wherein at least one bearing in the plurality of bearings at least partially supports the running belt.

- Petitioner argues in its Reply that Patent Owner implicitly construes the term “plurality of bearings”
- Petitioner submits newly presented dictionary definition of “bearing” that includes a functional relationship with other mechanical parts - “any part of a machine in or on which another part revolves, slides, etc.” (EX1051)

“plurality of bearings”



US009039580B1

(12) **United States Patent**
Bayerlein et al.

(10) **Patent No.:** US 9,039,580 B1
(45) **Date of Patent:** May 26, 2015

(54) **MANUAL TREADMILL AND METHODS OF OPERATING THE SAME**

(71) Applicant: **Woodway USA, Inc.**, Waukesha, WI (US)

(72) Inventors: **Douglas G. Bayerlein**, Oconomowoc, WI (US); **Vance E. Emons**, Hartland, WI (US); **Nicholas A. Oblonski**, Waukesha, WI (US); **Scott D. Hoerig**, Brookfield, WI (US); **Matthew J. Zank**, Milwaukee, WI (US); **Robert L. Zimpel**, Menomonee Falls, WI (US); **Joel W. Richards**, Wauwatosa, WI (US)

(73) Assignee: **Woodway USA, Inc.**, Waukesha, WI (US)

(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

(21) Appl. No.: **14/656,942**
(22) Filed: **Mar. 13, 2015**

Related U.S. Application Data

- (63) Continuation of application No. 14/243,716, filed on Apr. 2, 2014, now Pat. No. 8,986,169, which is a continuation of application No. 13/235,065, filed on Sep. 16, 2011, which is a continuation-in-part of application No. PCT/US2010/002743, filed on Mar. 16, 2010.
- (60) Provisional application No. 61/161,027, filed on Mar. 17, 2009.
- (51) **Int. Cl.** (2006.01)
A63B 22/02
- (52) **U.S. Cl.**
CPC **A63B 22/02** (2013.01); **A63B 22/0285** (2013.01)

(58) **Field of Classifi**
CPC
2022/02
A63B 22/02
See application

(56) **R**
U.S. PA
219,439 A
1,211,765 A

FOREIGN
CN 286054
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OTHER
Photographs of public dis
presented at IHRSA Trade

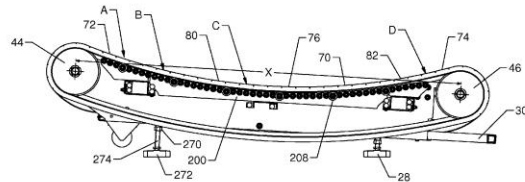
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Primary Examiner — Oren Ginsberg
(74) Attorney, Agent, or Firm — Foley & Lardner LLP

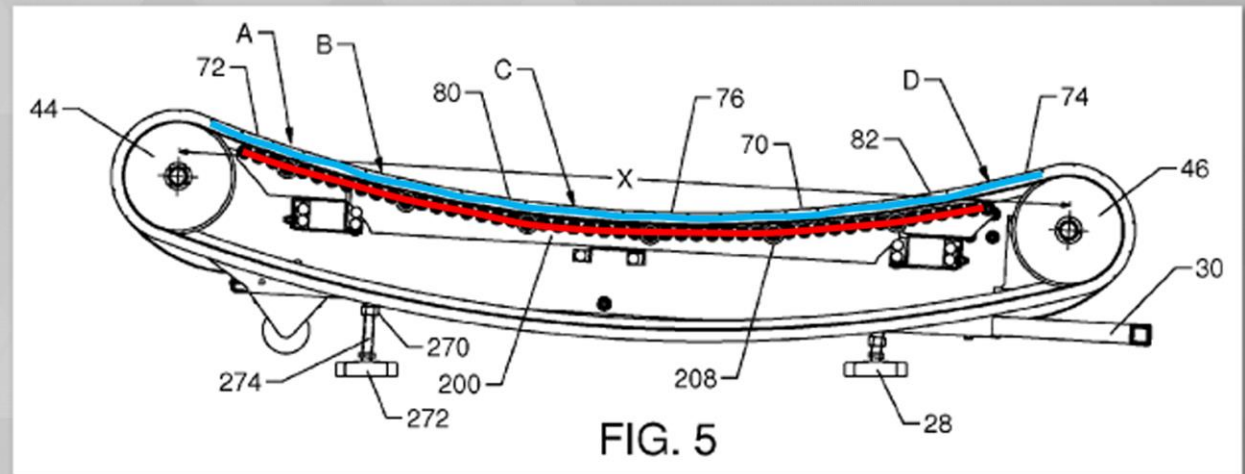
ABSTRACT

A manually operated treadmill is provided. The treadmill includes a treadmill frame, a front shaft rotatably coupled to the treadmill frame, a rear shaft rotatably coupled to the treadmill frame, a running belt including a contoured running surface upon which a user of the treadmill may run, wherein the running belt is disposed about the front and rear shafts such that force generated by the user causes rotation of the front shaft and the rear shaft and also causes the running belt to rotate about the front shaft and the rear shaft without the rotation of the running belt being generated by a motor, and a one-way bearing assembly configured to prevent rotation of the running surface of the running belt in one direction.

25 Claims, 20 Drawing Sheets



tially along the top profile 210 of the bearing rails 200. The running belt 16 contacts and is supported in part by the bearings 208 of the bearing rails and bearing 208 are configured to rotate, thereby decreasing the friction experienced by the running belt 16 as the belt moves along the top profile 210.



EX1001 Fig. 5 (annotated with running belt in blue and plurality of bearings in red)

“plurality of bearings”

The specification describes the “plurality of bearings,” which is positioned below and bears the weight of the running belt, and “rollers” or “wheels” that are positioned above or in line with the running belt and exert a downward force to hold the running belt in an arcuate shape. EX1001, 22:8-41, 23:26-24:14, 24:28-25:14, 25:66-26:3; EX2018 at ¶¶70-80.

Giachetti Testimony (EX2023, 54:17-19)

Q. Are you aware of any instance in which these rollers are referred to as bearings?

A. Not as I sit here.

EX1001
at 23:26-49

Referring to FIGS. 22-24, the treadmill 10 is shown including another exemplary embodiment of a track system configured to help induce and maintain the running belt in a desired non-planar shape to define the running surface, shown as a track system 800. Similar to track system 700, a treadmill according to this exemplary embodiment does not include front and rear shaft assemblies or bearing rails, but, rather, includes a pair of tracks 802 configured to provide for movement of a running belt 16 therealong. In this exemplary embodiment, each track 802 is shown as an elongated member having a substantially C-shaped cross section that defines a channel 804 having an opening 806 that faces the interior of the frame 40. An outer wall 808 each of the tracks 802 is disposed substantially adjacent to an inner surface of a left-hand or right-hand side member 52, 54 (shown, e.g., in FIG. 2) such that the openings 806 face each other. The outer wall 808 is substantially opposite an inner wall 810

As discussed above, the running belt 16 includes a plurality of laterally-oriented slats 228 each having a left-hand end 252 generally opposite a right-hand end 254. One of a plurality of roller or wheel assemblies 812 is coupled at each end 252, 254 of each slat 228 to mate with the tracks 802 and to provide for motion of the running belt 16 along the tracks 802.

EX1001
at 22:8-41

Referring to FIGS. 18-21, an embodiment of a running belt retention system including a track system 700 and configured to help induce and maintain the running belt in a desired non-planar shape to define the running surface according to an exemplary embodiment.

A treadmill according to this exemplary embodiment does not include front and rear shaft assemblies or bearing rails, but, rather, includes a pair of opposed tracks 702 configured to provide for movement of a running belt 16 therealong. The tracks 702 are spaced apart, generally define the path that the running belt 16 will travel, and substantially replicate at least a portion of the running surface. Each track 702 includes a side support wall 708 and a guide portion 710 generally centrally-disposed along the side support wall 708. The guide portion 710 extends from an inner side 712 of the side support wall 708 towards the interior of the treadmill frame, defined generally between the left-hand side member and the right-hand side member. The guide portion 710 generally defines the contour of the running surface that is defined by the running belt 16 when coupled to the tracks 702. An outer side 714 each side support wall 708 is disposed substantially adjacent to an inner surface of one of the side members of the treadmill frame.

A plurality of roller or wheel assemblies 716 are connected with, preferably mounted directly to or integral with, each of a plurality of slats 228 of the running belt 16. Each a laterally-oriented slat 228 includes a left-hand end 252 generally opposite a right-hand end 254. One of a plurality of wheel assemblies 716 is coupled at each end 252, 254 of each slat 228 at an interior surface 256. The wheel assemblies 716 are configured to be mated with the tracks 702 and provide for motion of the running belt 16 along the tracks 702.

"plurality of bearings"

Prior Board decision in the 849 FWD on the construction of "plurality of bearings" did not account for newly presented dictionary evidence for "bearing" and root word "bear"

- "Patent Owner does not offer a definition of 'bearing' that relates to its structure. Rather, Patent Owner's proposed definition relates to the position and function of a 'bearing.' ... Thus, we do not construe 'bearings' as requiring any particular structure, positioning under the running belt, nor bearing any weight."
 - The dictionary definition proffered by Petitioner shows that "bearing" is defined according to its functional relationship with another part
 - The root "bear" also provides a functional definition requiring weight bearing

bear, *v.i.* 1. to carry or sustain a heavy burden.
But man is born to *bear*. —Pope.
2. to endure; to be patient; as, my burden is greater than I can *bear*.
3. to produce fruit; to be fruitful; as, the tree *bears* well.
This age to blossom, and the next to *bear*. —Dryden.
4. to press (with *on* or *upon*); as, to *bear* hard *upon* an opponent.
5. to take effect; to succeed; to have an influence; as, to bring matters to *bear*.
6. to be situated, as to the point of compass, with respect to something else; as, the land *bore* southeast by east from the ship.
7. to relate or refer (to); with *on* or *upon*; as, his argument *bears upon* the subject with force.
8. to extend, point, lie, or move in a given direction; as, the road *bore* left: bring the guns to *bear*.
9. to be capable of sustaining weight; as, the ice will *bear*.

bear'ing, *n.* 1. the manner in which a person bears or conducts himself; gesture; mien; behavior.
I know him by his *bearing*. —Shak.
2. the situation of an object, with respect to another object, by which it is supposed to have a connection with it or influence upon it, or to be influenced by it; relation.
But of this frame, the *bearings* and the ties. —Pope.
3. in architecture, the portion of a piece of timber which rests upon, or is inserted into a wall; also, the wall that supports it.
4. in navigation, the position of a distant object with regard to a ship's position, as on the bow, on the lee quarter, etc.; the direction or point of the compass in which an object is seen.
5. [*pl.*] in heraldry, any figure on the field.
A carriage covered with armorial *bearings*. —Thackeray.
6. the act, capacity, or time of producing or giving birth; as, the *bearing* of a child.
7. anything borne or produced, as crop, fruit, etc.
8. in machinery, any part of a machine in or on which another part revolves, slides, etc.
9. endurance; patience under affliction; as, my trials are past *bearing*.
10. relevant; meaning; significance; relation; connection; application; as, your remarks have no *bearing* upon the subject.
11. [*pl.*] in shipbuilding, (a) the widest part of a ship below the gunwale; (b) a ship's water line when she is perfectly trimmed.
to *lose one's bearings*; to become lost or bewildered as to direction.
to *take bearings*; to ascertain one's position, as by the compass; hence, figuratively, to discover how matters stand; to ascertain the conditions.
Even —deportment, demeanor, carriage, be-

Summary of Challenged Claims

Disputed Elements from Challenged Claims of the '005 Patent

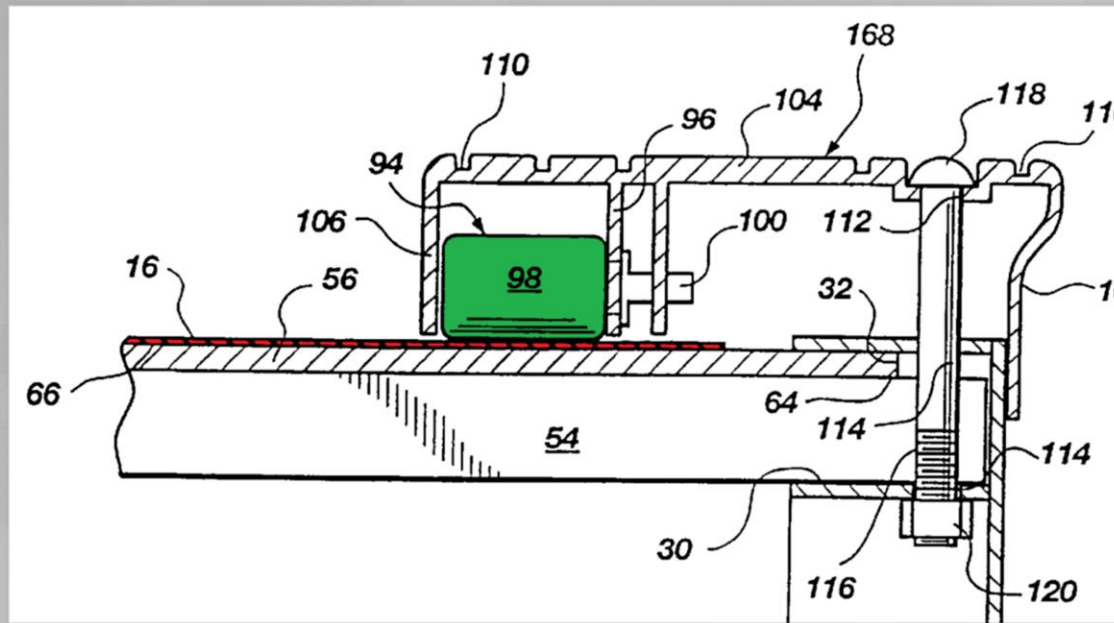
Disputed Elements	Asserted Prior Art
A “plurality of bearings” (Dependent Claims 6, 13, 16)	Socwell (Ground 1)
“a running belt...wherein the running belt includes a running surface, at least a portion of which is curved” (Independent Claims 1, 9, 15)	Tollkien (Ground 2)
“a front [or rear] shaft coupled to frame, the front [or rear] shaft being adapted to support the at least one front [or rear] running belt pulley” (Dependent Claims 2-3)	Tollkien (Ground 2)
“a plurality of bearings coupled to the frame” (Dependent Claims 6, 13, 16)	Tollkien (Ground 2)
A “safety device” (Independent Claims 1, 15)	Magid + Sclater (Ground 1) Sclater (Ground 2)

U.S. Patent No. 5,897,461 (“Socwell”)

Socwell Does Not Disclose a “Plurality of Bearings”

Socwell does not disclose “a plurality of bearings” as required by claims 6, 13, and 16:

- In Ground 1, Petitioner identifies Socwell’s rollers 98 as all but one of the recited “bearings.” Petition at 59-61.
- None of these structures, however, allow the belt to slide “in or on” the rollers, but rather the belt slides “under” the rollers 98. Rather, Socwell’s rollers 98 are positioned **above** belt 16 and exert a **downward force** to hold the belt in an arcuate shape. Thus, Socwell’s rollers 98 do not disclose a “plurality of bearings” because no part of the Socwell treadmill “slides” “in or on” the rollers 98 as Petitioner’s own dictionary definition of bearing requires.



EX1011 Fig. 5 (excerpted and annotated with running belt 16 in **red** and roller 98 in **green**)

Referring now to FIG. 5, the curved deck treadmill 10 may include one or more belt securing assemblies 94 which provide a means for retaining the endless belt 16 in a curvilinear configuration being substantially flush with the upper surface 66 of the deck 56. Preferably, the belt securing assemblies 94 provide a means for substantially conforming the inherent flexible nature of the belt 16 to the arcuate configuration of the intermediate portion 62 of the deck 56. In design, one or more belt securing assemblies 94 may be disposed in spaced-apart relation along the upper surface 66 of the intermediate portion 62 of the deck 56, as shown in FIG. 2, to sufficiently retain the belt 16 in operable disposition to the deck 56.

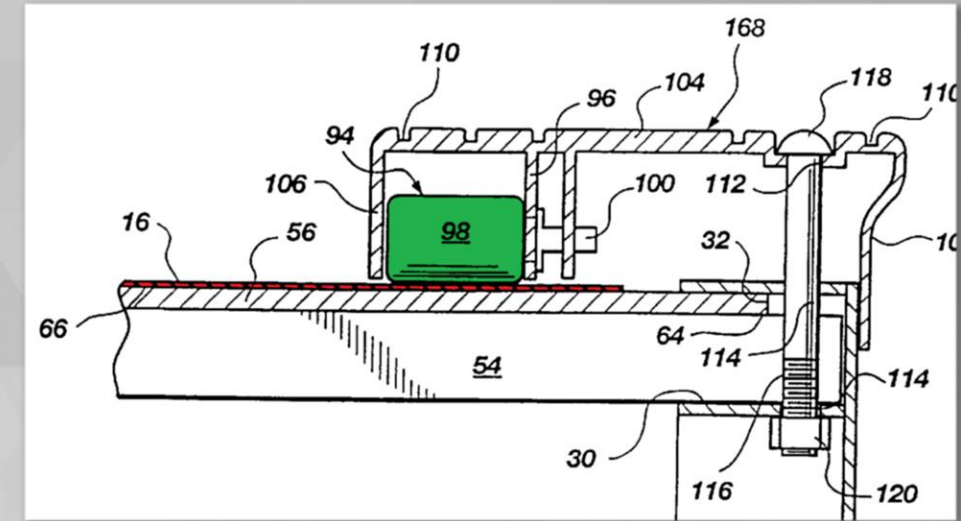
In one presently preferred embodiment of the present invention, the belt securing assembly 94 comprises a roller 98 having an axle 100 which rotatably engages a mounting bracket 96. The mounting bracket 96 is preferably disposed in relation to the roller 98 such that the roller 98 may engage the belt 16, thereby substantially retaining a side portion of the belt 16 substantially flush with the deck 56. In preferred

EX1011 at
10:5-23

Socwell Does Not Disclose a “Plurality of Bearings”

Petitioner’s discussion of the claims requiring that “at least one bearing of the plurality of bearings [be] configured to at least partially support the running belt” does not change that the rollers 98 are not “bearings” under Petitioner's own definition.

- Rollers 98, as a component of belt securing assembly 94, are intended to hold belt 16 in an arcuate configuration, which they accomplish by “being substantially flush with the **upper surface** 66 of the deck 56.” EX1011 at 10:5-9 (emphasis added).
- While deck 56 may support the belt and fit the Petitioner’s definition of “bearing,” such that at least one bearing is configured to partially support the running belt, it does not change the fact that the rollers 98 are by definition not bearings, so there is no “plurality of bearings.”



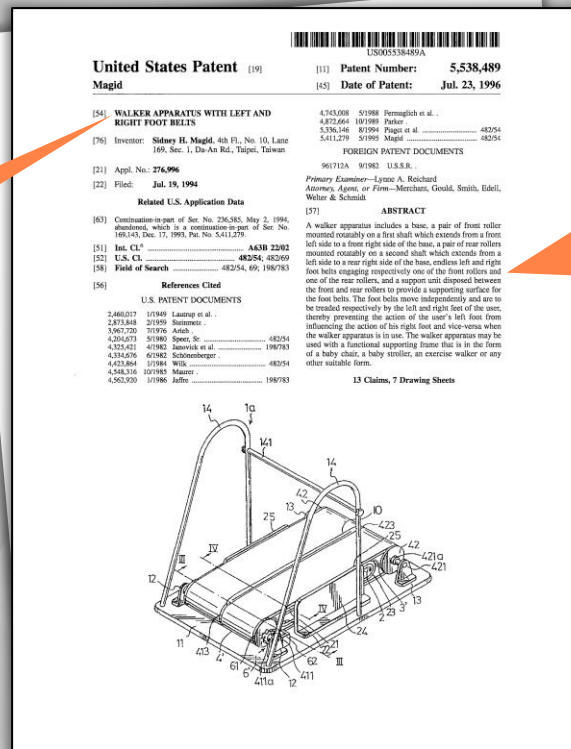
EX1011 Fig. 5 (excerpted and annotated with running belt 16 in **red** and roller 98 in **green**)

U.S. Patent No. 5,538,489 (“Magid”)
No Motivation to Combine

No Motivation to Combine Magid with Socwell

Ground 1 in the Petition must fail because it requires a combination with Magid's "unidirectional control means, 6, 6'," but a POSA would not be motivated to combine Magid with Socwell:

- A POSA would recognize that, unlike Socwell, Magid is directed to a two-belt therapeutic walker device the features of which are incompatible with exercise-focused devices intended for use by able-bodied adults.



[54] WALKER APPARATUS WITH LEFT AND RIGHT FOOT BELTS

[57]

ABSTRACT

A walker apparatus includes a base, a pair of front roller mounted rotatably on a first shaft which extends from a front left side to a front right side of the base, a pair of rear rollers mounted rotatably on a second shaft which extends from a left side to a rear right side of the base, endless left and right foot belts engaging respectively one of the front rollers and one of the rear rollers, and a support unit disposed between the front and rear rollers to provide a supporting surface for the foot belts. The foot belts move independently and are to be treaded respectively by the left and right feet of the user, thereby preventing the action of the user's left foot from influencing the action of his right foot and vice-versa when the walker apparatus is in use. The walker apparatus may be used with a functional supporting frame that is in the form of a baby chair, a baby stroller, an exercise walker or any other suitable form.

No Motivation to Combine Magid with Socwell

Ground 1 in the Petition must fail because it requires a combination with Magid's "unidirectional control means, 6, 6'," but a POSA would not be motivated to combine Magid with Socwell:

- The primary object of Magid is to provide two independently moving belts for therapeutic purposes, not a single belt.
- Magid further distinguishes the prior art, which it criticizes as being unsuited for therapeutic uses, from its own invention.

The running track of Morozov is not suited for use as a walker apparatus by people with uncoordinated feet movement, such as small children, physically handicapped people and old people, since the left and right feet of the user tread a single, wide bearing belt (B1) at the same time. Thus, a twisting moment (T1), (T2) applied by either the left foot (L) or the right foot (R) when treading the left-side or right-side parts of the bearing belt (B1) may influence smooth running of the latter relative to the inner endless belt (B2).

Magid (EX1012)
at 1:30-38

When in use, the user's feet drive a respective foot belt 4, 4', rather than a single, common wide belt as taught in the conventional running track described beforehand. Thus, the foot belts 4, 4' move independently when treaded by the left and right feet of the user, thereby preventing the action of the user's left foot from influencing the action of his right foot and vice-versa to permit natural, comfortable and a more ergonomic form of walking when the walker apparatus of the present invention is in use.

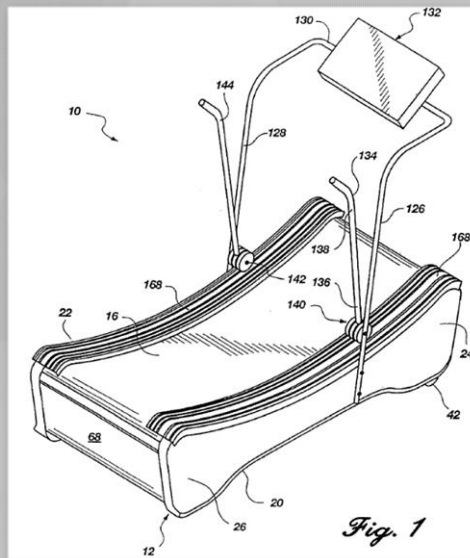
Magid (EX1012)
at 5:19-27

No Motivation to Combine Magid with Socwell

Socwell's designs is incompatible with Magid, both in terms of physical structure and in terms of intended purpose:

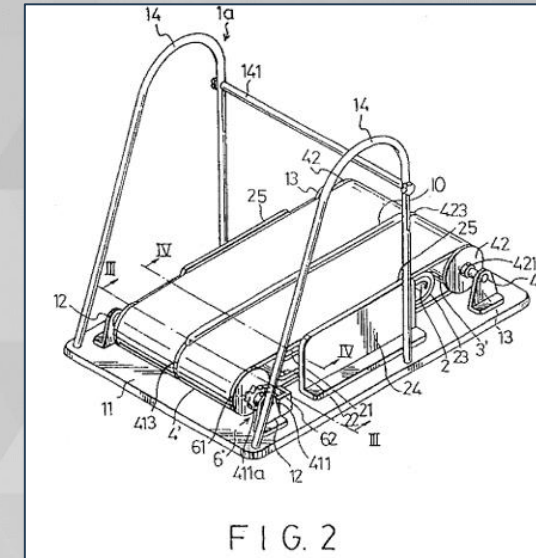
- Unlike Magid, Socwell focuses on a single belt design – i.e., the precise kind of design that Magid rejects in favor of having two footbelts capable of moving independently of one another – and is not designed for therapeutic use.

Socwell discloses a single belt 16 that provides a running surface for an "exercise treadmill"]"



Socwell (EX1011)
at 1:10-12, Fig. 1; *id. generally*

Magid discloses a two belts 4 and 4' for therapeutic purposes



Magid (EX1012)
at 1:46-52, 5:19-27, Fig. 2; *id. generally*

No Motivation to Combine Magid with Any Primary References

Socwell would have no need for the purported “safety device” disclosed in Magid:

- Magid’s walker device is intended for therapeutic use by “people with uncoordinated feet movement, such as small children, physically handicapped people and old people....” EX1012, 1:30-35, 5:52-55. While Magid’s flat, uniplanar walking surface is appropriate for such use, the intended users face a heightened risk of injury if one of Magid’s parallel walking belts moves in the opposite direction from that intended during use. EX2018 at ¶¶128-129.
- Thus, Magid requires a control means to prevent one of the belts from moving in the opposite direction **while the other remains stationary or moves in the correct direction** during normal use as, without such a control means, a user’s feet could move in opposite directions while in contact with their respective belts and cause injury. EX2018 at ¶130.
- In contrast, the single-belt design of Socwell has no such requirement as a single belt can only ever move in one direction. EX2018 at ¶131.

Blair Testimony (EX2018)

129. However, a POSA would expect those with “uncoordinated feet movement” to face a heightened risk if the one of the Magid’s two walking belts moves in the opposite direction from that intended during use. Such users would be expected to have balance and coordination problems that significantly limit their ability to correct for an unintended foot movement and thus increase their risk of injury. Such injuries include, for example, ligament, tendon, or muscular damage to the hip or knee that may result from hyperextension of the forward leg as the rearward leg unexpectedly moves in the opposite direction.

Giachetti Testimony (EX2023, 81:20-22)

“[A] person that has issues balancing is more precarious than a person who is what we would consider able-bodied.”

No Motivation to Combine Magid with Any Primary References

A POSA would recognize Magid to be incompatible with Socwell as Magid teaches away from a single-belt, non-planar, or multi-planar exercise treadmill:

- A curved running surface like that of Socwell would be inherently difficult to adapt and inappropriate for Magid's express therapeutic use by those with uncoordinated foot movements.
- Such users are "expected to have balance and coordination problems, and these deficiencies make walking or running on a curved or multi-planar surface unnecessarily dangerous as they increase the propensity for falls, particularly in the absence of features like handles or harnesses that allow the user to maintain their balance independent of their foot movements." EX2018 at ¶132.
- Socwell further criticizes the use of handles and other safety features that render the described devices unsuitable for use by those with physical handicaps and uncoordinated foot movement. *Id.* at ¶¶133-134.

Additionally, exercise treadmills of the prior art may furnish a user with an upright handle to grasp while exercising. While somewhat useful in retaining the user's balance on the rotating endless belt, having to grasp a fixed handle may impede the natural body motion of a user attempting to exercise. Such an encumbrance may be feasible when a user is attempting to walk, but when a user begins to jog or run on prior art exercise treadmills, having to grasp a handle to keep centered on the treadmill may severely interfere with one's natural body motion and further abdicate the inherent physical advantages of the exercise routine.

Socwell (EX1011)
at 2:56-67

No Motivation to Combine Magid with Any Primary References

Design and engineering requirements would also urge a POSA to avoid combining features of Magid's flat walking device with the curved treadmill of Socwell:

- In a curved treadmill, the only concern Petitioner identifies is that the belt will move in an unintended direction if the user mounts the treadmill at the rearward end.
- However, this concern is not referenced in the prior art and does not apply to a flat, uniplanar device like Magid where mounting the device from the rear is no different than mounting it at any other point. EX2018 at ¶¶136-140.

Blair Testimony (EX2018)

- The treadmill belt of Socwell is free to move in both a forward direction and a rearward direction. When a user steps onto the rear of the treadmill having a curved running surface, the user's weight may cause the treadmill belt to move in the unintended rotational direction, particularly if the user inadvertently mounts the device from or towards the rear. But despite teaching a curved running surface, Socwell does not recognize this potentially unwanted characteristic. Rather, Socwell explains that its curved running surface is sufficient to address the acknowledged danger of users' tendency to fall off the back of the treadmill. ¶138.
- To the extent Socwell discusses the need for adequate friction during rotation at all, it advocates for sufficient friction in **any** direction of belt motion, not unidirectional movement. ¶138.

No Motivation to Combine Magid with Socwell

Petitioner's Reply arguments must also fail

- Simply falling within the broad field of "exercise equipment" is not enough to establish a motivation to combine Magid with the other prior art.
- Petitioner's reliance on third-party safety standards must fail as no Ground includes these so-called standards as primary or secondary references, nor does any Ground purport to rely on a POSA's general knowledge of the art.
- Petitioner does not contest that Magid's teachings would discourage a POSA from combining it with Socwell, instead improperly urging the Board to disregard these teachings as "not relevant to the proposed combinations." Reply at 20. This is improper under controlling law; the Board must consider Magid for all it teaches, and the sole case Petitioner cites (*In re Gurley*, 27 F.3d 551 (Fed. Cir. 1994)) does not stand for any contrary proposition.

Demonstrating that a reference is analogous art or relevant to the field of endeavor of the challenged patent is not sufficient to establish that one of ordinary skill would have had reason to combine its teachings with other prior art in the manner set forth in the claim. . . . Mere compatibility of the references is likewise not sufficient.

Johns Manville Corp. v. Knauf Insulation, Inc.,
IPR2018-00827, Paper 9, 10 (PTAB Oct. 16, 2018) (informative).

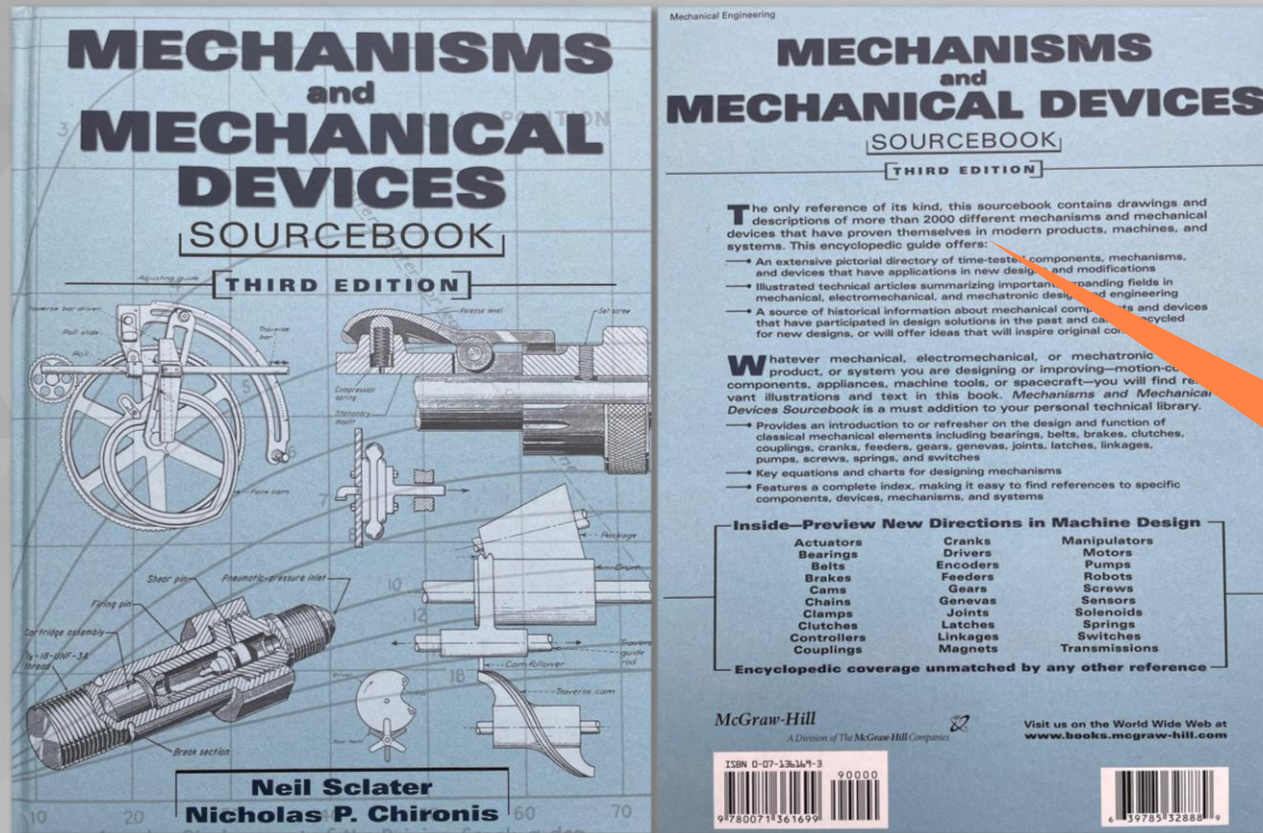
[T]he prior art could contain one reference suggesting a combination and others critiquing or otherwise discouraging the same. Even a single reference can include both types of statements, and . . . ***it is error to fail to consider the entirety of the art.***

Arctic Cat Inc. v. Bombardier Rec. Prods.,
876 F.3d 1350, 1360 (Fed. Cir. 2017) (emphasis added).

***Mechanisms & Mechanical Devices Sourcebook
("Sclater")
No Motivation to Substitute***

No Motivation to Substitute Sclater for Magid

A POSA would not be motivated to replace Magid with the specific clutch Petitioner cites in Ground 1 of the Petition absent impermissible hindsight bias:



- Petitioner relies on highly limited, cherry-picked sections of Sclater, but even these identify dozens of mechanisms and devices, at least twenty of which are different types of clutches.
- Petitioner fails to offer any explanation as to why a POSA would select the specific clutch it proposes to substitute for Magid's unidirectional control means.

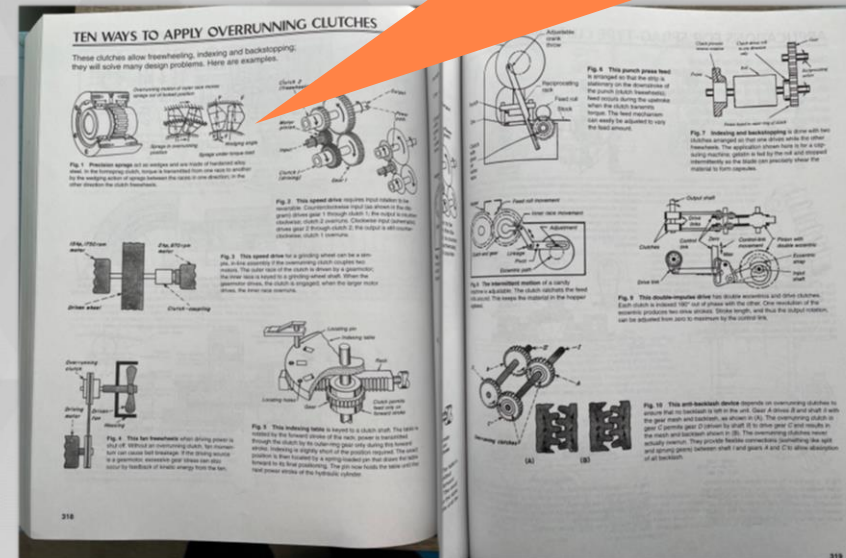
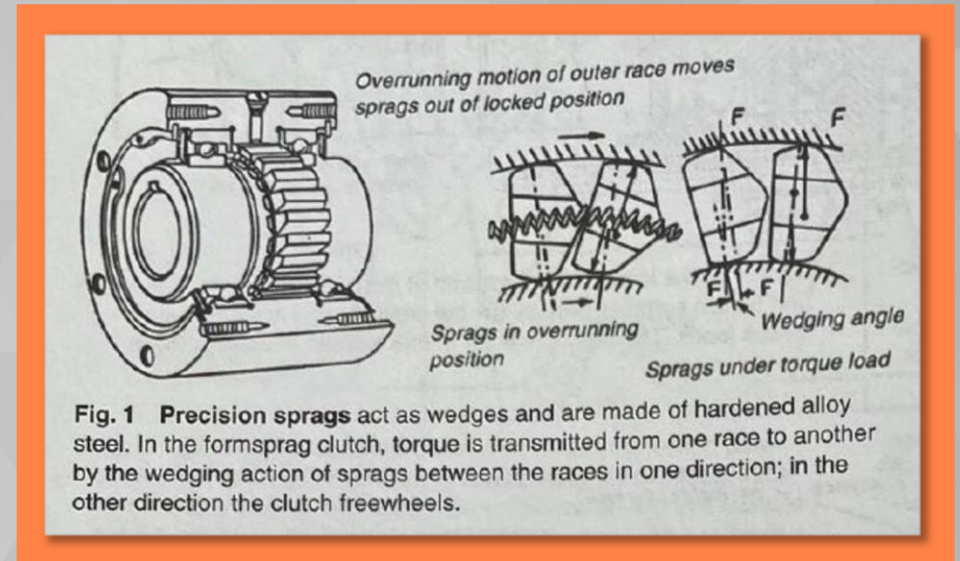
"The only reference of its kind, this sourcebook contains drawings and descriptions of **more than 2000 different mechanisms and mechanical devices** that have proven themselves in modern products, machines, and systems."

Sclater (EX1017) at 1, 24

No Motivation to Substitute Sclater for Magid

A POSA would not be motivated to replace Magid with the specific clutch Petitioner cites absent impermissible hindsight bias:

- Sclater says virtually nothing about the specific clutch Petitioner relies on.
- Sclater's full teachings regarding the specific clutch Petitioner cites, which is discussed alongside nine other overrunning clutches that also "allow freewheeling, indexing and backstopping" and "will solve many design problems," is reproduced on the right:
- Emerson cannot provide the missing motivation to combine when it was never cited as a reference in any Ground.



Sclater (EX1017)
at 318-19

No Motivation to Substitute Sclater for Magid

A POSA would not be motivated to replace Magid with the specific clutch Petitioner cites absent impermissible hindsight bias:

- Other features Petitioner argues provide a rationale for using the identified clutch – “reduced noise and improved durability” – are either not addressed in connection with any sprag-type clutch (as with “durability”) or not ascribed to the specific clutch on which Petitioner relies (as with “reduced noise”).
 - “Reduced noise” is attributed to friction-type clutches generally, and even Petitioner’s limited excerpts of Sclater identify at least six different friction-type clutches with the same benefits. EX1017 at 316, 302-03.

Fig. 1 Elementary overriding clutches: (A) A ratchet and pawl mechanism converts reciprocating or oscillating movement to intermittent rotary motion. This motion is positive but limited to a multiple of the tooth pitch. (B) A friction-type clutch is quieter, but it requires a spring device to keep the eccentric pawl in constant engagement. (C) Balls or rollers replace the pawls in this device. Motion of the outer race wedges the rollers against the inclined surfaces of the ratchet wheel.

Sclater (EX1017) at 316

Friction-Type Clutches Identified in EX1017 at 302-303

- **Plate Clutch**: “The plate clutch transmits power through the friction developed between the mating plate faces....”
- **Cone Clutch**: “The cone clutch, like the plate clutch, requires axial movement for engagement, but less axial force is required because of the increased friction between mating cones....”
- **Expanding Shoe Clutch**: “This clutch is engaged by the motion of the control arm. It operates linkages that force the friction shoes radially outwards so that they contact the inside surface of the drum.”
- **Cam and Roller Clutch**: “... While driving, friction rather than springs force the rollers to wedge tightly between the members to provide positive clockwise drive.... If the driven member should begin to run ahead of the driver, friction will force the rollers out of their tightly wedged positions and the clutch will slip....”
- **Expanding Shoe Centrifugal Clutch**: “Two friction shoes, attached to the driving member, are held inward by springs until they reach the ‘clutch-in’ speed.”
- **Mercury Gland Clutch**: “This clutch contains two friction plates and a mercury-filled rubber bladder....”

No Motivation to Substitute Sclater for Magid

Petitioner fails to provide any actual evidence to support the alleged motivation to replace Magid with the specific clutch Petitioner cites:

- The virtually nonexistent “analysis” of Petitioner’s expert Dr. Giachetti is illustrative of Petitioner’s reliance on hindsight bias.
- Petitioner’s expert Dr. Giachetti did not conduct **any** analysis of the noise caused by a ratchet-and-pawl clutch compared to any other components of a treadmill.
- Despite admitting that different treadmills make different amounts of noise and volunteering a lengthy list of factors that can affect the amount of noise a treadmill make, Dr. Giachetti admitted that he came to the problem “preloaded with how quiet a belt on rollers is” and baldly asserted that he “didn’t have to” conduct any analysis to confirm his preconceived assumptions. EX2023 at 102:23-107:10.
 - **Thus, the only “evidence” the Petitions rely on for the purported motivation to substitute Sclater for Magid is this unsupported and untested say-so.**

Giachetti Testimony (EX2023 at 102:23-103:13)

Q. Did you do any actual analysis of the noise that would be caused by Magid's ratchet and pawl relative to other noises caused by the treadmill's operation as part of your analysis?

A. Well, having experience with conveyors, I came preloaded with how quiet a belt on rollers is....

...

Q. So you didn't actually conduct any sort of formal analysis comparing the sound of all the various components in Magid relative to each other, did you?

A. I didn't have to.

No Motivation to Substitute Sclater for Magid

Petitioner fails to provide any actual evidence to support the alleged motivation to replace Magid with the specific clutch Petitioner cites:

- Dr. Giachetti also failed to consider any of the factors Sclater itself explains must be considered before selecting a particular sprag-type clutch.
 - At most, Dr. Giachetti could point only to broad statements about sprag-type clutches in general or comparing general “speed” characteristics of ratchet-and-pawl clutches to roller-and-friction clutches, without specifically discussing overrunning speed. EX2023 at 89:8-15, 94:16-95:10.

“Overrunning sprag clutches transmit torque in one direction and reduce speed, rest, hold, or free-wheel in the reverse direction. Applications include overrunning, back stopping and indexing. **Their selection – similar to other mechanical devices – requires a review of the torque to be transmitted, overrunning speed, type of lubrication, mounting characteristics, environmental conditions, and shock conditions that might be encountered.**”

Sclater (EX1017) at 320
(emphasis added)

Giachetti Testimony (EX2023 at 101:2-23)

Q. ... Where in this discussion -- again, in your actual argument related to combining Sclater with the other references, do you mention the type of lubrication to be used?

A. I don't discuss -- I don't believe I discussed lubrication issues, except that it's present in Emerson and present in the Power Transmission Handbook.

Q. You don't actually reference any of those disclosures from Emerson or the PT Handbook in this section, do you?

A. I don't believe I do. But I do reference Emerson, that where they say they -- they sell these specific type of one-way bearings for exercise equipment, food processing equipment, and roll conveyors.

Q. What about shock conditions? Do you ever mention shock conditions anywhere in this section?

A. I don't recall mentioning shock conditions.

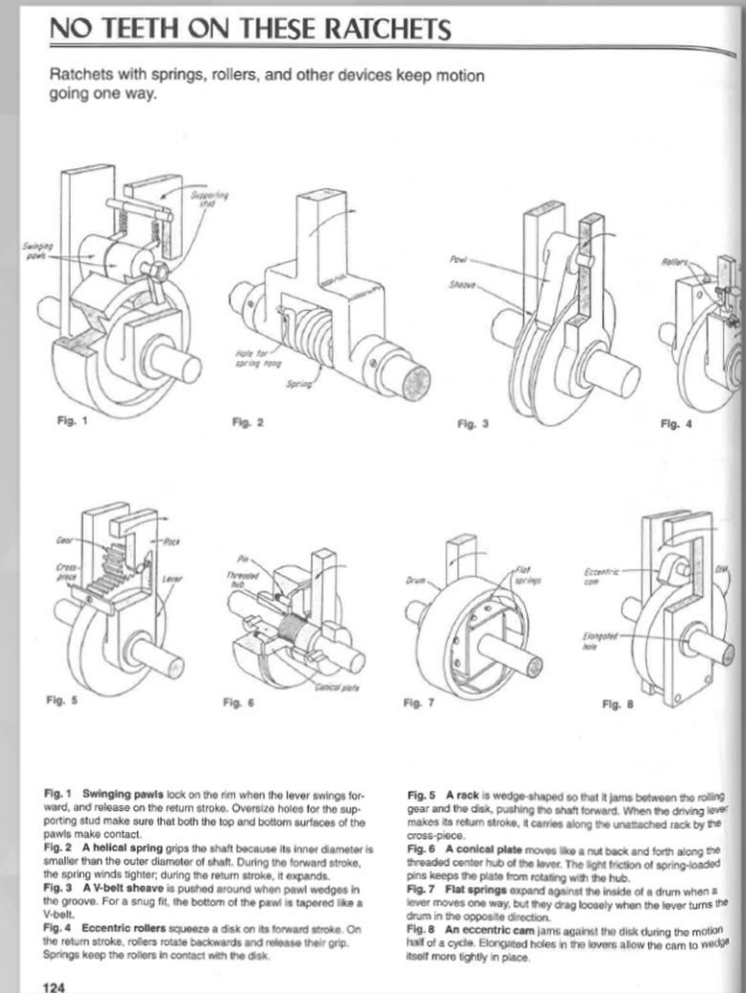
No Motivation to Substitute Sclater for Magid

Petitioner fails to provide any actual evidence to support the alleged motivation to replace Magid with the specific clutch Petitioner cites:

- At the same time, Dr. Giachetti apparently assumed (incorrectly) that a ratchet-and-pawl device must have teeth, which is the sole feature he identifies as causing the supposed undesirable noise. EX2023 at 99:16-100:4, 106:9-20; EX1003 at ¶143 ("Ratchet and pawl clutch mechanisms make noise during operation. The pawl is spring-loaded to engage each gear tooth of the ratchet and it would make an audible 'click' when colliding with the gear tooth root after overrunning or passing over each tooth.").
- But – in a section that Petitioner notably omitted it from its EX1017 – Sclater itself makes clear that there are many ratchet-and-pawl clutches that do not have teeth. Any one of these would have been a more obvious choice to a POSA than a sprag-type clutch. EX2018, ¶¶147-148.

Giachetti Testimony (EX2023 at 99:25-100:2)

"[Y]ou're dependent on that pawl being able to lock into the teeth on the ratchet."



Sclater (EX2021) at 124

No Motivation to Substitute Sclater for Magid

Petitioner's approach has been consistently rejected:

- Generic statements like those Petitioner relies on in Sclater, which are untethered to the feature incorporated into the proposed combination, cannot support a motivation to combine:

Depomed contends that Purdue's generic and conclusory statements of interrelated teachings of the prior art are indicative of the fact that Purdue presented no credible evidence on a motivation to combine the prior art. . . . We agree with Depomed that the Board applied the correct legal standard in its obviousness analysis and that substantial evidence supports its finding that Purdue failed to establish that a person of ordinary skill in the art would have had a reason to combine Baveja and Shell to pursue the claimed invention with a reasonable expectation of success.

Purdue Pharma L.P. v. Depomed, Inc., 643 F. App'x 960, 964-66 (Fed. Cir. 2016).

- A POSA would immediately recognize that the same benefits also apply to the countless other mechanisms and devices that Sclater discloses in equal detail. EX2018, ¶¶143-155. Petitioner's failure to explain why a POSA would have been motivated to use the **specific clutch Petitioner relies on** is fatal to the Sclater-based Grounds.
- Nor can the addition of Sclater be considered a simple "substitution" of known elements. Socwell lacks any comparable one-way bearing element. Thus, there is no known element for which Sclater's sprag-type clutch could be "substituted" in the Socwell reference.

No Motivation to Substitute Sclater for Magid

Petitioner's approach has been consistently rejected:

- Without any of the recited benefits being tied to the specific mechanism Petitioner relies on, it is clear that Petitioner only selected the sprag-type clutch described in the Petitions after using the Challenged Claims as a guide for its obviousness arguments.
- The Federal Circuit and the Board have long recognized that Petitioner's approach is improper and a clear example of impermissible hindsight bias.

Given the lack of any discussion of the advantages—if any—of the particular portion of the Katzman design used by Petitioner, the dissimilarity between Katzman's permanent structure and Wu's conveniently assembled and disassembled design, and the cursory nature of Professor Rake's analysis..., we are persuaded, based on the current record, that Professor Rake's analysis is based on improper hindsight.

Amazon.com, Inc. v. JumpSport, Inc., IPR2018-00715, Paper 8 at 38-39 (PTAB Sept. 6, 2018).

"Care must be taken to avoid hindsight reconstruction by using 'the patent in suit as a guide through the maze of prior art references, combining the right references in the right way so as to achieve the result of the claims in suit.'"

In re NTP, Inc., 654 F.3d 1279, 1299 (Fed. Cir. 2011) (citations omitted).

"To the extent that [Petitioner] relies on the problem to be solved to supply the reason to combine the prior art, it failed to demonstrate to the Board that the problem was known in the art or that [Petitioner's] formulation of the problem was derived directly from the prior art, rather than from the challenged claims."

Purdue Pharma L.P. v. Depomed, Inc., 643 F. App'x 960, 966 (Fed. Cir. 2016).

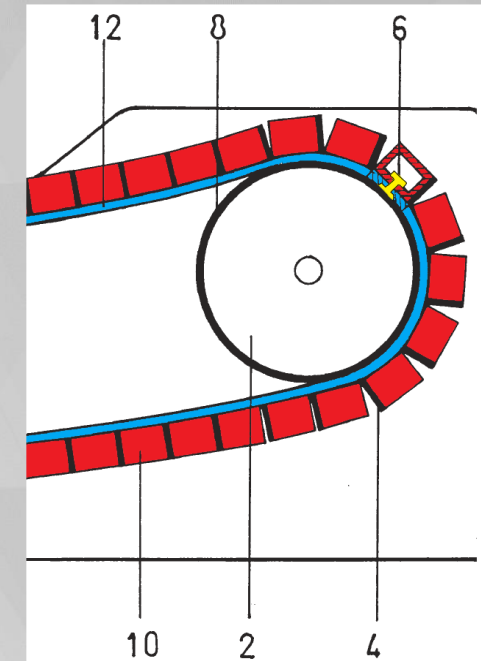
English Translation of German Patent DE 199 22 822 B4 (“Tolkien”)

Petitioner fails to establish that Tollkien discloses “a running belt...wherein the running belt includes a running surface, at least a portion of which is curved”

Petitioner only identifies Tollkien’s “belt 12” as the running belt:

- Petitioner and Dr. Giachetti do not point to any portion of the supposed “running belt” in Tollkien for the “running surface” element. Rather, both point to a series of cross members that are attached to either belt 12 or belt 30 as the “running surface.”
- Tollkien’s cross members 10 are riveted to either belt 12 or belt 30 with rivets 6—accordingly, they are separate structures. EX1031, ¶[0018]; EX2018, ¶¶93-95.
- But such cross members are not “include[d]” in the running belt as required by the claims; rather, they are separate structures, as evidenced by the fact that they must be riveted to either belt 12 or belt 30. EX1031, ¶[0018]. This is supported by the plain and ordinary meaning of “include”—other courts have found such plain and ordinary meaning of the term “including” to require comprising as part of the whole claimed structure.

The plaint and ordinary use of the word “including” meant that the term “require[ed] both the upper and lower portions of the pawl means to be contained by, and therefore to comprise, as a part of the whole, the tongue structure....”
Pehr v. Rubbermaid, Inc., 87 F.Supp.2d 1222, 1230 (D. Kan. 2000)



Petitioner fails to establish that Tollkien discloses “a running belt...wherein the running belt includes a running surface, at least a portion of which is curved”

Petitioner’s new Reply arguments are improper and should be disregarded.

- Under controlling law, Reply arguments that could have been but were not included in the Petition itself cannot be considered.
- The Reply raises arguments that could have been included in the Petition or addressed in Dr. Giachetti’s opening declaration but were not. Because they were not and are instead completely absent from the Petition, these arguments should not and cannot be considered.

(b) All arguments for the relief requested in a motion must be made in the motion. A reply may only respond to arguments raised in the corresponding opposition, patent owner preliminary response, patent owner response, or decision on institution. A sur-reply may only respond to arguments raised in the corresponding reply and may not be accompanied by new evidence other than deposition transcripts of the cross-examination of any reply witness.

37 C.F.R. § 42.23(b).

It is of the utmost importance that petitioners in the IPR proceedings adhere to the requirement that the initial petition identify “with particularity” the “evidence that supports the grounds for the challenge to each claim.” 35 U.S.C. § 312(a)(3). “All arguments for the relief requested in a motion must be made in the motion. A reply may only respond to arguments raised in the corresponding opposition or patent owner response.” 37 C.F.R. § 42.23(b). . . . Unlike district court litigation—where parties have greater freedom to revise and develop their arguments over time and in response to newly discovered material—the expedited nature of IPRs bring with it an obligation for petitioners to make their case in their petition to institute. While the Board’s requirements are strict ones, they are requirements of which petitioners are aware when they seek to institute an IPR.

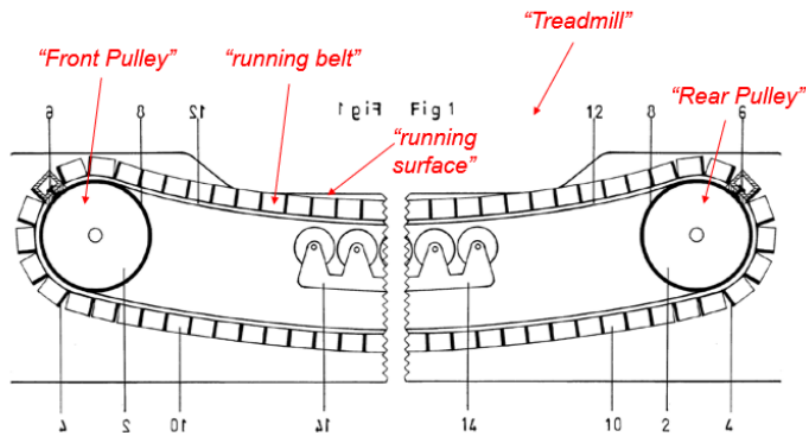
Intelligent Bio-Systems, Inc. v. Illumina Cambridge, Ltd.,
821 F.3d 1359, 1369 (Fed. Cir. 2016).

Petitioner fails to establish that Tolkien discloses “a running belt...wherein the running belt includes a running surface, at least a portion of which is curved”

Petitioner’s new Reply arguments are improper and should be disregarded.

The Petition argued only that Tolkien’s belt 12 was the “running belt” and that the cross members 10 were the “running surface”:

Tolkien discloses a continuous belt 12 (“running belt”) that is wrapped around the front and rear rollers. (Ex.1031, [0020].) The belt 12 is supported at the ends by the rollers 2 and in the middle by the runners 14. (Ex.1031, [0018]–[0020].) Tolkien discloses that the belt 12 includes cross members 10 that extend outward to form a curved running surface. (Ex.1031, [0018]–[0020], Fig.1; Ex.1003, ¶¶271, 326-327, 355.)



Ex.1031, Fig.1 (Annotated)

Petition,
at 79

The Reply attempts to backfill this deficiency, arguing for the first time that Tolkien’s belt 12 and cross members 10 should be considered a single assembly comprising both the running belt and running surface:

Petitioner relies on Tolkien’s belt assembly 12 for satisfying the “running belt” limitations and Tolkien’s cross members 10 for satisfying the “at least one slot” limitation of claim 8. (Pet.,79,96.) The belt assembly 12 includes the cross members 10, which “form a curved running surface.” (*Id.*,79.)

Reply,
at 6

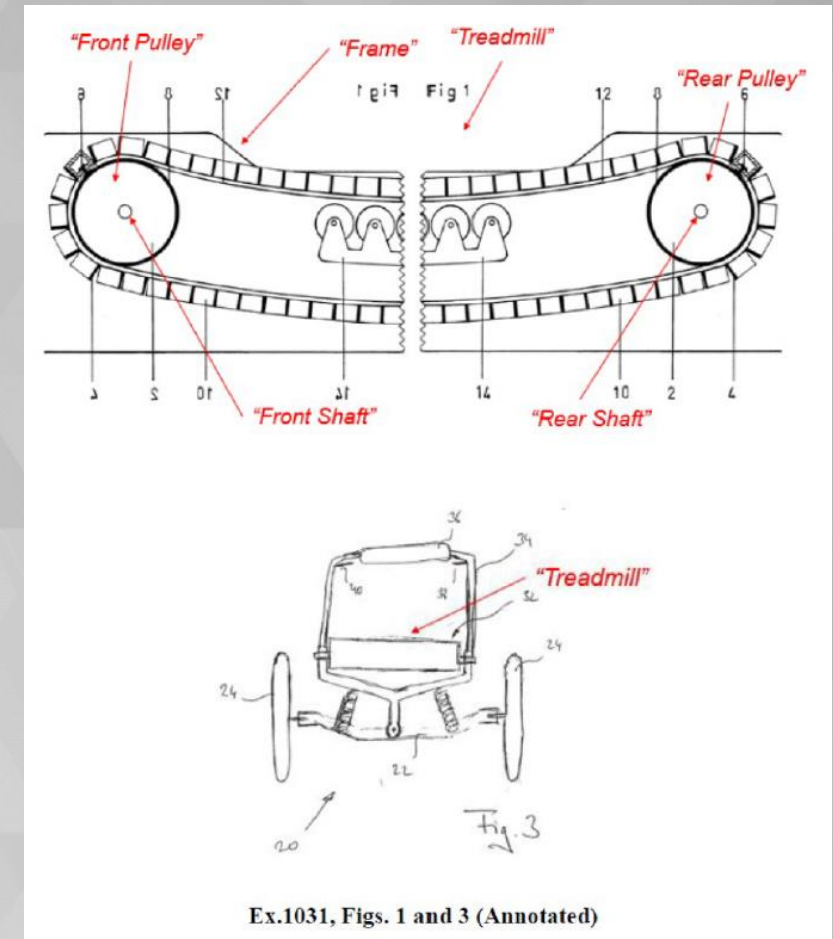
Tolkien describes the belt 12 as an assembly that includes a belt and cross members, i.e., “[t]he belt 30 is analogous to the belt 12 shown in Fig. 1, in particular **comprising** numerous cross members.” (Ex.1031,¶[0022].) The belt assembly 12 also includes a belt attached to the cross members 10. “The running surface is formed by cross members 10 that are transverse to the direction of movement, which are attached with rivets 6 to a continuous belt 12.” (Ex.1031,¶[0018];Ex.1036,¶32.)

Reply,
at 7

Tollkien does not disclose “a front [or rear] shaft coupled to frame, the front [or rear] shaft being adapted to support the at least one front [or rear] running belt pulley”

Petitioner’s expert admitted “shaft” does not appear in Tollkien:

- Petitioner provides no support from the Tollkien written specification for the proposition that Tollkien expressly discloses a front or rear shaft that supports the identified front or rear pulley.
- Petitioner’s argument is solely based on Figures 1 and 3, pointing to unmarked and unlabeled parts of the figure without any supporting details that the identified structures must be a “shaft”
- The Petition never explains why a POSA would understand the identified structures in the figures to constitute “a front [or rear] shaft coupled to frame, the front [or rear] shaft being adapted to support the at least one front [or rear] running belt pulley.”
- Dr. Blair testified that the figures could be interpreted as non-shaft structures. EX2018, ¶101.



Tollkien does not disclose “a front [or rear] shaft coupled to frame, the front [or rear] shaft being adapted to support the at least one front [or rear] running belt pulley”

Tollkien does not expressly disclose a front/rear “shaft” and Petitioner fails to provide any evidence or explanation why a POSA would understand Tollkien’s figures to necessarily disclose a “shaft”:

- As the Board has previously found – and the Federal Circuit affirmed – a Petitioner cannot carry its burden without explaining some basis for finding that a POSA would understand the prior art in the manner asserted or providing some evidence of why a POSA would understand the relevant teachings as necessarily disclosing the claimed elements, as inherency requires.
- Neither the Petition nor Dr. Giachetti’s supporting declaration provide any such evidence or explanation. Petitioner has not met its burden to show that Tollkien discloses “a front [or rear] shaft coupled to frame, the front [or rear] shaft being adapted to support the at least one front [or rear] running belt pulley”

*To the extent Petitioner views the foregoing statements, by themselves, as somehow disclosing an interface, Petitioner does not explain any basis for finding that a person of ordinary skill in the art would understand Kenoyer in this manner. See Pet. 15–16; Pet. Reply 16. We submit that it is certainly possible that these statements could inherently disclose the claimed interface, but Petitioner has provided no evidence why a person of ordinary skill would understand these statements as necessarily disclosing the claimed interface, as inherency requires. See *In re Oelrich*, 666 F.2d 578 (CCPA 1978) (“Inherency, however, may not be established by probabilities or possibilities.”). In the absence of any such evidence or explanation, we do not believe Petitioner has carried its burden. *Microsoft Corp. v. Biscotti Inc.*, IPR2014-01459, Paper 49, 17-18 (PTAB Mar. 17, 2016), *aff’d*, 878 F.3d 1052 (Fed. Cir. 2017).*

Tollkien does not disclose “a front [or rear] shaft coupled to frame, the front [or rear] shaft being adapted to support the at least one front [or rear] running belt pulley”

Petitioner’s new Reply arguments are improper and should be disregarded.

The Petition argued only that Tollkien’s Figures 1 and 3 show a front/rear “shaft”:

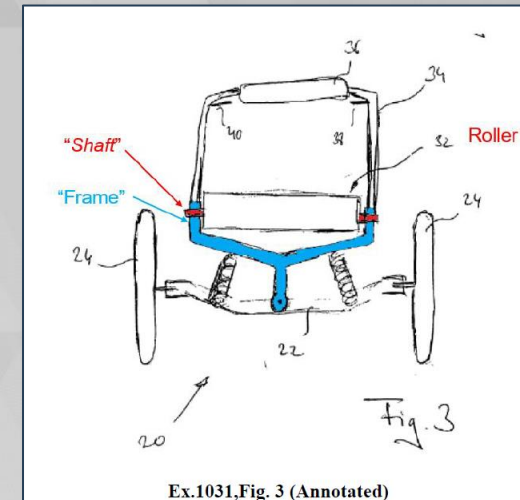
Tollkien also discloses, in Figure 1, a shaft (“*front shaft*”) extending through the center of the front roller 2 (“*front pulley*”) and a shaft (“*rear shaft*”) extending through the center of the rear roller 2. (Ex.1031, Fig.1.) In Figure 3, Tollkien illustrates the shaft extending from opposing ends of the roller 32 and through holes formed in the frame to couple the roller to the frame for support. (Ex.1031, Fig.3; Ex.1003, ¶¶300-301.)

Petition,
at 90

The Reply attempts to backfill this deficiency, arguing for the first time that a POSA’s “common sense” shows the existence of the front/rear “shaft” and provides a newly annotated figure that was not in the Petition:

PO’s arguments are rigidly focused on the alleged lack of express disclosure in Tollkien, without taking full account of a POSA’s “knowledge, creativity, and common sense.” *Randall Mfg. v. Rea*, 733 F.3d 1355, 1362 (Fed. Cir. 2013). Nonetheless, Dr. Giachetti has further annotated Figure 3 to label the “*shaft*” extending from the roller 32 and coupled to the “*frame*.” (Ex.1036, ¶¶48-49.)

Reply,
at 11



Reply,
at 12

Tollkien does not disclose “a front [or rear] shaft coupled to frame, the front [or rear] shaft being adapted to support the at least one front [or rear] running belt pulley”

Petitioner’s new Reply arguments are improper and should be disregarded:

- Petitioner states that it was simply “common sense” that Tollkien discloses a front/rear shaft but fails to provide any support in the Petition for why “common sense” would lead a POSA to interpret Tollkien’s figures as now alleged. The case Petitioner cites even specifically “emphasized the importance of a factual foundation to support a party’s claim about what one of ordinary skill in the relevant art would have known.”
- Not only is this improper argument made for the first time in Reply, it is not sufficient under Federal Circuit precedent to make cursory arguments that “common sense” fills the gaps of a reference’s teachings, without any reasoned analysis and evidentiary support for such arguments. Neither the Petition nor the Reply provide any such reasoned analysis and evidentiary support.

After KSR, we recognized that courts must “consider common sense, common wisdom, and common knowledge in analyzing obviousness.” Arendi, 832 F.3d at 1361. However, we cautioned that common sense cannot be used as a “wholesale substitute for reasoned analysis and evidentiary support, especially when dealing with a limitation missing from the prior art references specified.” Id. at 1362. Likewise, in Perfect Web Techs, Inc. v. InfoUSA, Inc., we reiterated that “[c]ommon sense has long been recognized to inform the analysis of obviousness if explained with sufficient reasoning.” 587 F.3d 1324, 1328 (Fed. Cir. 2009).

B/E Aero., Inc. v. C&D Zodiac, Inc., 962 F.3d 1373, 1380 (Fed. Cir. 2020)

Petitioner fails to establish that Tollkien discloses “a plurality of bearings coupled to the frame”

Petitioner only identifies Tollkien’s “runners 14” as the “plurality of bearings coupled to the frame” but fails to provide any evidentiary support:

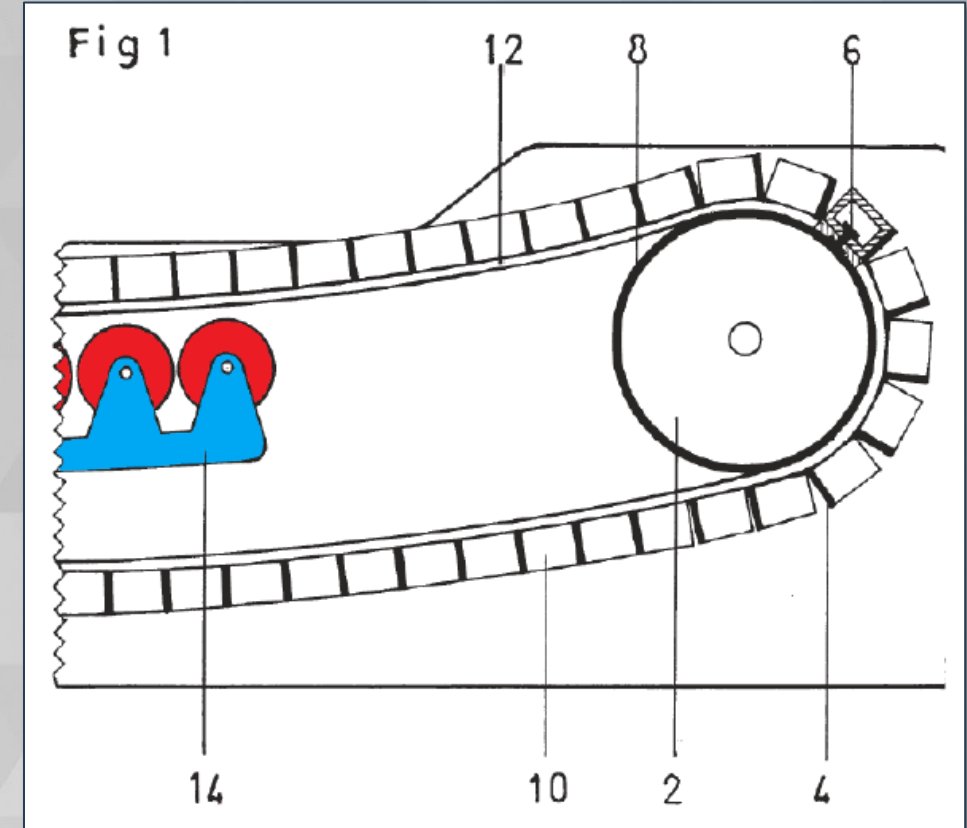
- Petitioner and Dr. Giachetti baldly assert that a POSA “would have understood that the runners 14 are mounted and fixed to the frame and the bearings are mounted for rotation about the axles and relative to the frame to provide rolling engagement with the continuous belt 12.”
- However, neither Petitioner nor Dr. Giachetti provide any evidentiary support for the argument that Tollkien discloses that the runners 14 are “mounted and fixed to the frame” or that any portion of the runners 14 constitute “bearings” as that term is used in the ‘005 Patent. Rather, this assertion is made in the Petition without any citation to Tollkien itself but rather only a citation to Dr. Giachetti’s declaration, which simply repeats this bald assertion verbatim without any further explanation, analysis, or citation.

No Evidentiary Support Provided	
Petition at 94-95	EX1003 at ¶308-309
A POSA would have understood that the runners 14 are mounted and fixed to the frame and the bearings are mounted for rotation about the axels and relative to the frame to provide rolling engagement with the continuous belt 12. (Ex.1003, ¶¶308-309.)	A POSA would have understood that the runners 14 are mounted and fixed to the frame and the bearings are mounted for rotation about the axels and relative to the frame to provide rolling engagement with the continuous belt 12. Therefore, Tollkien discloses “a plurality of bearings [runners 14] coupled to the frame, at least one bearing of the plurality of bearings [runners 14] configured to at least partially support the running belt [belt 12].”

Petitioner fails to establish that Tolkien discloses “a plurality of bearings coupled to the frame”

A POSA would not understand Tolkien’s runners 14 to be “a plurality of bearings coupled to the frame”:

- Tolkien’s sole written disclosure of runners 14 simply states that they are “placed underneath the running surface” and “prevent the belt from bouncing when in use.” Id., EX1031, ¶[0020]. Nothing in this disclosure suggests rotation or rolling engagement with the belt.
- As shown in the annotated figure, there is a conspicuous space between the belt and the round elements of runners 14 (red).



[0020] Each roller 2 is coated with rubber 8, thus increasing the frictional adhesion between the belt 12 and the rollers 2 and protecting the roller where the rivet comes in contact therewith. The tension is released on the outer surface of each roller and in the lower area of the belt, facing away from the running surface, such that the belt can travel over the rollers without any notable resistance. Because the spacing between adjacent cross members is very small, and the strips also expand, no space is indicated in the illustration between the cross members in the section of the belt that is currently underneath. The runners 14 placed underneath the running surface prevent the belt from bouncing when in use.

Petitioner fails to establish that Tollkien discloses “a plurality of bearings coupled to the frame”

A POSA would not understand Tollkien’s runners 14 to be “a plurality of bearings coupled to the frame”:

- Tollkien has no written or figure support for Petitioner's unsupported argument that the runners 14 are coupled to the frame.
- Dr. Giachetti was unable to identify any express disclosure – written or pictorial – indicating that Tollkien’s runners 14 are coupled to the frame rather than to some other component of the treadmill. And Dr. Giachetti admitted that if/how the runners 14 are attached to the frame is “**not specified**” and “**not depicted**” in Tollkien.
- Tollkien does not expressly disclose that runners 14 (i.e. what Petitioner alleges are a “plurality of bearings”) are “coupled to the frame.” To the extent Petitioner relies on an inherency argument, the Petition fails to provide any evidence why a POSA would understand Tollkien to necessarily disclose that the alleged plurality of bearings are “coupled to the frame.”

Giachetti Testimony (EX2082, 71:13-74:18)

Q. Can you point to any structure actually depicted here on figure 1 [of Tollkien] that is the attachment point between runners 14 and the frame?

A. Well, there could be a ton of different ways that it's attached and it's not specified because the POSA can pick. So there is not a – I think what you're asking me is do I see like a hole for a screw or something like that and I don't know that that's needed for these. There are a number of different ways they could be attached. So it's not depicted here. ...

Q. Does Tollkien ever describe any of, and to quote you, “a ton of different ways” that the runners 14 could be attached to the frame?”

A. I don't recall sitting here that Tollkien discusses the method of fabrication.

Petitioner fails to establish that Tollkien discloses “a plurality of bearings coupled to the frame”

Petitioner’s new Reply arguments are improper and should be disregarded.

The Petition argued only that a POSA would have understood that the runners 14 are mounted and fixed to the frame and the bearings are mounted for rotation about the axels and relative to the frame providing rolling engagement with the continuous belt 12, with no citations to supporting evidence whatsoever:

Tollkien discloses runners 14 that support a middle portion of the belt 12: “The runners 14 placed underneath the running surface prevent the belt from bouncing when in use.” (Ex.1031, [0020].) As shown in Fig. 1, the runners 14 include a base or support structure (annotated in red) that supports a plurality of bearings (annotated in blue). The bearings are supported for rotation relative to the support structure by a plurality of axles (annotated in green). The bearings are arranged underneath the running belt 12 and are configured to engage the underside of the running belt 12 to provide support and to prevent bouncing of the belt. (Ex.1003, ¶¶307, 348-349, 363-364.)

A POSA would have understood that the runners 14 are mounted and fixed to the frame and the bearings are mounted for rotation about the axels and relative to the frame to provide rolling engagement with the continuous belt 12. (Ex.1003, ¶¶308-309.)

Petition,
at 93-95

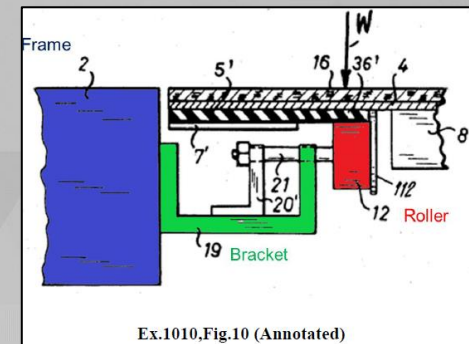
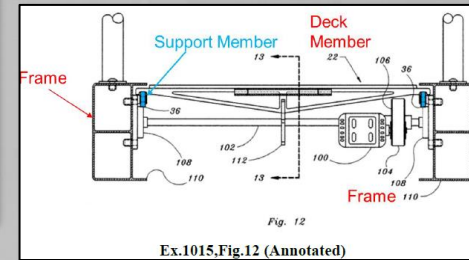
The Reply attempts to backfill this deficiency, arguing for the first time that a POSA’s “common sense” shows that runners 14 are coupled to the frame, and provides newly annotated figures from prior art references that were not present in the Petition:

A POSA would have had such an understanding based on, for example, the teachings of other prior art treadmills having side bearing systems that include small rolling element bearings mounted to the side of the frame to support track style running surfaces such as Schonenberger and Abelbeck (Ex.1010;Ex.1015;Ex1036,¶¶50-53.)

Reply, at 13

Abelbeck discloses, with reference to Figure 12 (above), support members 36 or bearings (blue) mounted to the side frame 110 of a treadmill that support a track-style deck formed from a plurality of deck members 22. (Ex.1015,10:48-54.) Similarly, Schonenberger discloses rollers 12 (“bearings”) “carried on shafts 21 secured to a bracket 19 which is attached to the sidewall 2 ... or to the frame of the apparatus” as shown below in Figure 10. (Ex.1010,8:45-51;Ex.1003,¶¶58-59,68;Ex.1036,¶¶53-60.)

Reply, at 14



No Motivation to Combine Sclater with Tollkien

Petitioner’s false and contradictory statements about what Socwell teaches does not support a motivation to combine Sclater with Tollkien:

- Petitioner and Dr. Giachetti only say that a POSA would recognize a need for a unidirectional control means because of Socwell’s alleged teachings that a curved running surface does not address certain safety concerns. Petitioner and Dr. Giachetti make incompatible, contradictory statements about Socwell’s teachings about the safety concern of falling off the back of the treadmill.
- Socwell teaches a “novel curved deck treadmill which overcome several deficiencies of exercise treadmills of the prior art” namely “injuries sustained as a result of an uncontrolled rotation of the anti-friction rollers engaging the belt.” EX1011, 3:19-22, 1:29-33. Specifically, Socwell teaches that a curved running surface solves the safety issue associated with prior art flat treadmill design. EX1011, 3:10-22; EX2018 at ¶¶163-165.
- Petitioner’s Reply concedes that Socwell’s curved surface “may solve the issue of a user falling off the back of the treadmill”

Example of Contradictory Giachetti Testimony	
EX1003 at ¶134	EX1003 at ¶243
Rather than relying on a motor, Socwell discloses calibrating the rollers and deck to provide optimal frictional resistance of the belt to ensure safety while providing proper resistance for to exercising. (Socwell, Ex. 1011, 11:56-61.) Socwell explains that the curved running surface prevents a user from falling off the back. (Socwell, Ex. 1011, 3:40-45.)	Socwell explains that curved running surfaces do not fully address the safety issue of unexpected forward motion of the running belt e.g., if a user steps onto the rearward end of the running surface (indicated by the red arrow), causing the foot to unexpectedly move towards the lowest portion of the treadmill. This unexpected forward motion could result in a fall.

No Motivation to Combine Sclater with Tollkien

Petitioner presents no evidence about the “problem of instability when mounting or dismounting a treadmill”:

- Petitioner fails to identify any evidence in the prior art that mounting and dismounting a curved manual treadmill could motivate the combination of Sclater with Tollkien.
- Petitioner’s assertion that Chickering and Socwell identify such a problem is plainly false. Petitioner makes no citation to any specific teaching in Chickering or Socwell, in either the Petition or Reply, that supports their bald argument that the problem of instability when mounting or dismounting a curved treadmill was known in the art.
- For example, the Petition, Reply, and Dr. Giachetti’s first declaration (EX1003) all state that it has “long been recognized [that] users may be injured by falling off of a treadmill while mounting or dismounting it, or during use” but there are no citations following any of these statements to Chickering or Socwell, because these references make no mention of any dangers associated with mounting or dismounting.

- Dr. Giachetti admitted in deposition that the Socwell reference taught that the curved running surface itself was a safety feature.

Giachetti Testimony (EX2023 at 55:10-56:7)

Q. Didn’t Socwell conclude that it was sufficient to curve the running surface to address this inherent danger [associated with users tending to fall off the back end of the treadmill and become injured]?

A. Yeah. So they state that that is for safety while the user is exercising on the treadmill.

Q. Socwell doesn’t disclose any other sort of safety device besides the curved shape of the treadmill, does it?

A. Not while for – not for getting on and off of it, no. But it discloses the curve for safety while actually performing exercise.

No Motivation to Combine Sclater with Tollkien

Even if a POSA would have been motivated by any safety concern with mounting or dismounting a curved manual treadmill, Petitioner provides no specific motivation to select the sprag-type clutch from Sclater to combine with Tollkien:

- The generic theory that “conveyors and treadmills operate the same,” and that some sprag-type clutches have been described for use in exercise equipment applications generally, albeit not in Sclater itself but rather in a different product catalog (Emerson) that was not used as a reference in Ground 2, is insufficient.
- As with the Socwell + Magid + Sclater combination from Ground 1, Petitioner relies on generic and threadbare arguments for why a POSA would have been motivated to select the specific sprag-type clutch from Sclater to combine with Tollkien.
- Dr. Giachetti does not rely on Sclater for a particular sprag-type clutch device to combine with Tollkien, instead relies on Sclater for “general” teaching that sprags are in the category of one-way bearings, without providing any reasons why a POSA would actually select any particular sprag.

Giachetti Testimony (EX2023 at 90:3-94:15)

Q. ...Is it your position that you are not relying on the specific sprag depicted in this paragraph?

A. I think that calling this a specific sprag is not consistent with the way that I’m highlighting a sprag one-way bearing in general. And you can see in Sclater that there are a number of depictions of sprag-type one-way bearings. For example, on page 316, there are other depictions of the sprags within a one-way bearings. So...

Q. Did you rely on anything else secondarily to the specific image depicted in paragraph 169 for those specific limitations?

A. Well, I would say that that graphic, which is only part of Figure 1 on page 318 of Sclater, pretty much points you to the direction of the other ones. But as far as being explicit in my declaration for those – those specific components, even though I highlighted it at several places others – in other areas of the declaration, that it’s not explicitly relying on those other embodiments of sprag-type clutches. It’s just a general depiction of the sprag-type clutch.

Secondary Considerations of Nonobviousness

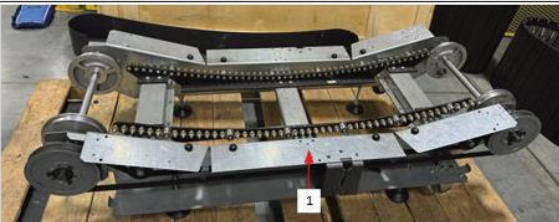
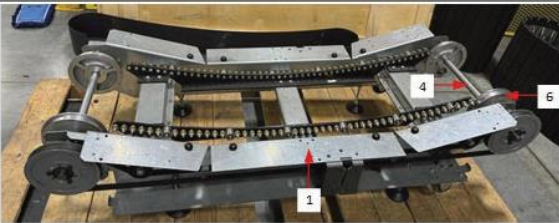
Secondary Considerations Confirm Nonobviousness

- Patent Owner has established nexus between many of the challenged claims by showing that the claims are coextensive with the claimed inventions.
 - Petitioner's arguments to the contrary rely on misstatements of law and should be rejected.
- Patent Owner has established the existence of various secondary considerations, including:
 - Commercial Success
 - Industry Praise
 - Copying
 - Failure of Others
 - Passage of Time Between Publication of the Prior Art and the Inventions

Patent Owner Has Established Nexus

Nexus is established by Dr. Blair’s unrebutted testimony:

- Dr. Blair provided a detailed analysis confirming that Patent Owner’s CURVE® line of treadmills on the whole practice and are coextensive with at least the following Challenged Claims:
 - Claims 1-4, 6-13, 15-16 of the '005 Patent (EX2083; EX2018 at ¶¶176-178; EX1050, 22:4-13)

the '005 Patent	Woodway CURVE	
a frame;	A “frame” is literally present in the Woodway CURVE. As shown, the Woodway CURVE includes a frame [1]. <i>See also, e.g., Woodway Non-Motorized Treadmills User Manual: 02/2018, UM-NT-EN-02 33 (2018) (referring to “the frame”).</i>	
at least one front running belt pulley coupled to the frame;	A “at least one front running belt pulley coupled to the frame;” is literally present in the Woodway CURVE. As shown, the Woodway CURVE includes a front running belt pulley [6] is coupled to the frame [1]. As defined in the specification, “the term ‘coupled’ means the joining of two members directly or indirectly to one another Such joining may be achieved with the two members or the two	

EX2083 at 2

Patent Owner Has Established Nexus

Nexus is established by Dr. Blair's un rebutted testimony:

- Woodway's CURVE® line of treadmills include the Curve (formerly called the Speedboard), the Curve XL, the Curve LTG, the Curve FTG, the Curve 3.0, the Curve Trainer, the EcoMill, and the EcoMill Legacy Treadmills.



- The differences between the treadmills within the CURVE® line do not affect whether they practice the claims of the '005 Patent. EX2018 at ¶1178.

[T]here is a presumption of nexus for objective considerations when a patentee shows that the asserted objective evidence is tied to a specific product and that product is the invention disclosed and claimed in the patent. . . . [A] patent challenger cannot successfully rebut the presumption with argument alone—it must present evidence.

WBIP, LLC v. Kohler Co., 829 F.3d 1317, 1329 (Fed. Cir. 2016) (internal citations and quotation marks omitted).

Patent Owner Has Established Nexus

Rather than provide actual evidence to rebut the established presumption of nexus, Petitioner misstates the law to claim that the presumption does not apply in the first place:

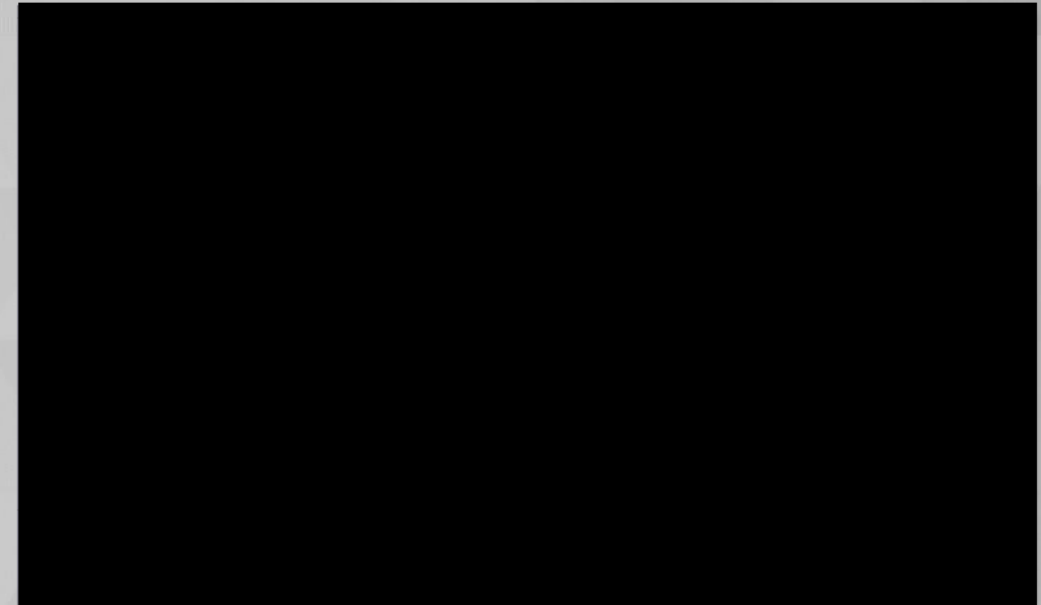
- Although Petitioner asserts that a presumption of nexus should not apply because all claim elements are (allegedly) found in the prior art, the case Petitioner relies on (*Lectrosonics, Inc., v. Zaxcom, Inc.*, IPR2018-01129, Paper 33 (PTAB Jan. 24, 2020) (precedential)), both stands for the opposite proposition and is inapplicable when Patent Owner has provided an analysis demonstrating that its products are coextensive with the Challenged Claims.
- In *Lectrosonics*, the Board offered **alternative** ways of showing nexus only after finding that “a presumption of nexus is **inappropriate**” where because Patent Owner did “**not provide an analysis demonstrating that its products are coextensive (or nearly coextensive) with the challenged claims.**” *Lectrosonics*, Paper 33 at 33 (emphasis added):

However, “[a] finding that a presumption of nexus is inappropriate does not end the inquiry into secondary considerations.” *Fox Factory*, 944 F.3d at 1375. “To the contrary, the patent owner is still afforded an opportunity to prove nexus by showing that the evidence of secondary considerations is the ‘direct result of the unique characteristics of the claimed invention.’” *Id.* at 1373–74 (quoting *In re Huang*, 100 F.3d 135, 140 (Fed. Cir. 1996)). “Where the offered secondary consideration actually results from something other than what is both claimed and novel in the claim, there is no nexus to the merits of the claimed invention,” meaning that “there must be a nexus to some aspect of the claim not already in the prior art.”

Commercial Success Is Uncontroverted

PROTECTIVE ORDER FINANCIAL MATERIAL

- Patent Owner introduced the first commercial product of its kind.
- Patent Owner then enjoyed 100% of the market share for curved, manual treadmills for several years – Patent Owner’s sales increased steadily and significantly through 2017 when Petitioner’s introduction of a copycat treadmill – the infringing Assault AirRunner (see EX2070) – heavily impacted Patent Owner’s sales.
- [REDACTED]
- Patent Owner’s commercial success is based on the key features of its claimed inventions. Indeed, except for copycats and infringers, prior to the introduction of Patent Owner’s CURVE® line of treadmills, competitors focused on fundamentally different treadmill designs and did not offer any manual curved treadmills.



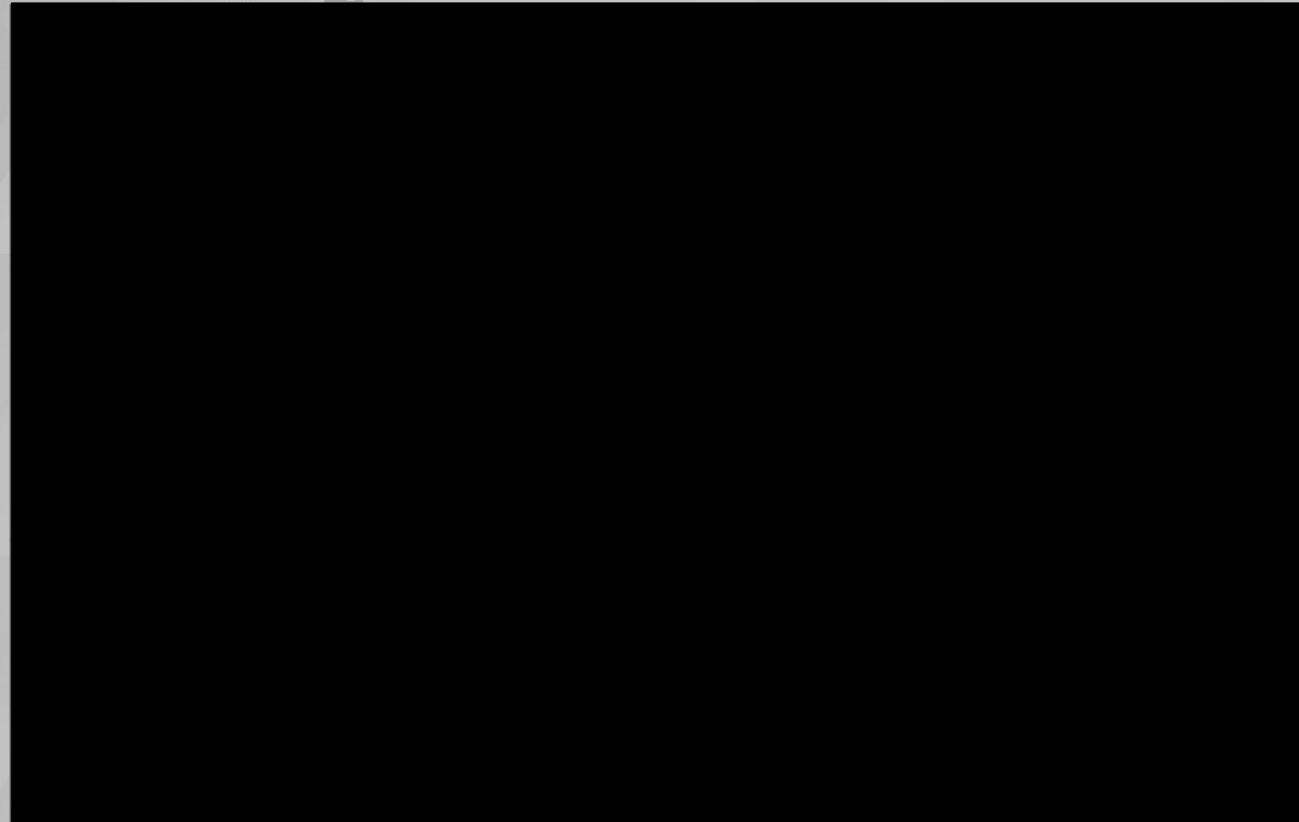
EX2020 at ¶18

When a patentee can demonstrate commercial success, usually shown by significant sales in a relevant market, and that the successful product is the invention disclosed and claimed in the patent, it is presumed that the commercial success is due to the patented invention.

Chemours Co. FC, LLC v. Daikin Indus.,
4 F.4th 1370, 1378 (Fed. Cir. 2021).

- When Petitioner introduced its copycat treadmill – the infringing Assault AirRunner (see EX2067, EX2068, EX2070) – Petitioner’s copycat sales heavily impacted Patent Owner’s sales, as shown in the comparison chart.

- [REDACTED]



Supplement to POR at 1

Commercial Success Is Uncontroverted

Patent Owner's evidence is more than sufficient to establish commercial success with a nexus to the claimed inventions:

- Market share data is not required to show commercial success. Petitioner's arguments to the contrary are contradicted by Federal Circuit precedent. *Chemours Co. FC, LLC v. Daikin Indus.*, 4 F.4th 1370, 1378 (Fed. Cir. 2021).
- Likewise, the commercial success of the CURVE® line of products is not undermined by the fact that some CURVE® products include unclaimed features.
 - Petitioner's laundry list of purported unclaimed features and bare speculation that they contributed to the commercial success of some products cannot overcome the presumption of commercial success.
 - In fact, the unclaimed features Petitioner identifies are not found in all CURVE® treadmills (e.g., EX1037, 27:8-30:8) and all CURVE® treadmills have experienced commercial success.

"[T]he commercial success of the embodiment with additional unclaimed features is to be considered when evaluating the obviousness of the claim, provided that embodiment's success has a sufficient nexus to the claimed and novel features of the invention."

ArcelorMittal France v. AK Steel Corp., 700 F.3d 1314, 1325 (Fed. Cir. 2012).

"[W]e have never held that the existence of one or more unclaimed features, standing alone, means nexus may not be presumed."

Teva Pharms. Int'l GmbH v. Eli Lilly & Co., 8 F.4th 1349, 1361 (Fed. Cir. 2021).

"[A] patent challenger cannot successfully rebut the presumption with argument alone—it must present evidence."

WBIP, LLC v. Kohler Co., 829 F.3d 1317, 1329 (Fed. Cir. 2016).

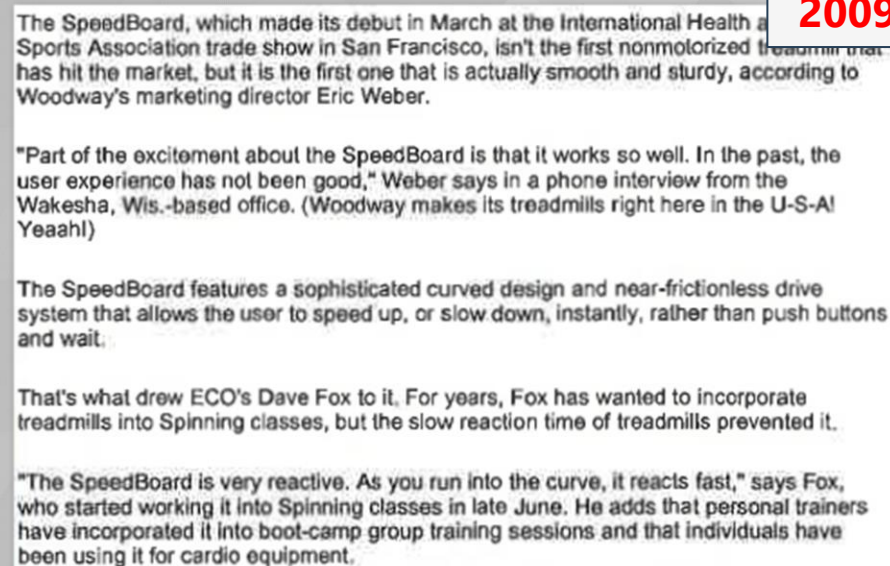
Industry Praise Is Undeniable

Patent Owner's products that embody and are coextensive with the claimed inventions have received significant and undeniable industry praise:

- In 2010, the CURVE® treadmill was nominated for an Innovation Award by FIBO – the leading international trade show for fitness, wellness, and health. EX2020 at ¶156; EX2057.
- Treadmills within the CURVE® line have been featured and praised in numerous industry publications, including Health and Fitness Sports Magazine (2010), Athletic Business (2010), Government Recreation & Fitness (2010), and Club Solutions Magazine (2014), and in mainstream media publications such as Men's Health (2014), Men's Health U.K. (2017), the Los Angeles Times (2019), South Carolina's Post and Courier (2009), and the Wall Street Journal (2015). EX2020 at ¶¶43-55.



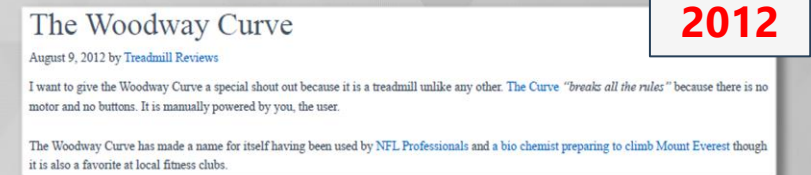
EX2045 at 5



EX2053 at 2



EX2046 at 5



EX2050 at 1

Copying by Petitioner and Third Parties Highlights Nonobviousness

Copying by both Petitioner and others confirms the nonobviousness of the claimed inventions:



Samsara copycat



Petitioner's copycat



CURVE® treadmill

EX2058 at 1;
EX2067 at 1;
EX2018 at ¶181
EX2020 at ¶¶57-58, 64

- Samsara Fitness released a clear copycat product that not only superficially resembles the CURVE® treadmill but was also found to infringe several of Patent Owner's patents – including the '580 Patent. Samsara has since taken a license to those patents. EX2020 at ¶¶23, 59.
- Petitioner's AirRunner is similarly the subject of ongoing litigation due to its copying and infringement of Patent Owner's patents, including the '580, '745, and '884 Patents. EX2067; EX2068; EX2069.

Clear Copying by Petitioner

- Petitioner's own documents – which its former co-CEO testified are not confidential – also establish that Petitioner copied Patent Owner's documentation and the specific associated products, even retaining express references to "WOODWAY Customer Service" and the results of Woodway's testing of its products. EX2071; EX2072.



EX2071

WOODWAY Customer Service. 11.2 Running Surface Belt is Stuck/Difficult to Move: Check for any obstacles around or under the belt and remove them if possible. Remove side rails if they are properly aligned on rollers. Contact a WOODWAY Customer Service technician to determine where the cause of the problem could be. 11.3 Squeaking Sounds: Bearings may be worn. Contact a WOODWAY Customer Service technician to replace bearing. Toothed belt rubbing against guide roller: Grease edge of belt with a universal lubricant. Broken guide roller or roller bearing: Contact a WOODWAY Customer Service technician to replace broken part. Timing belt rubbing against the pulley: Grease the edge of the timing belt with a small amount of all-purpose grease. Note: Excessive grease can cause slippage.

EX2071 at 20

The name says it all: Like running on air, but with a powerful amount of punch. This treadmill is like none you have ever known, burning up to 30% more calories than the average motorized version and built with intense training in mind.

EX2072

Failure of Others and Passage of Time Underscore Nonobviousness

The failure of others to successfully develop and commercialize a curved, manual treadmill and the length of time between the cited prior art and Patent Owner's priority date demonstrate the nonobviousness of the claimed inventions:

- No one had successfully commercialized a curved, manual treadmill before the priority date of the '005 Patent, and even then, Patent Owner was the only provider of curved, manual treadmills on the market until others began to copy Patent Owner's CURVE® products, beginning in 2014. EX2020, ¶¶17, 22, 35. This is evidence of nonobviousness.

The finding that the claimed invention resolved a long-felt need to do away with the wasteful sulfuric acid process and its unwanted by-products tends to show the nonobviousness of the claimed invention as does failure of others and copying; Cyanamid tried but failed to develop the claimed invention and copied it instead.

Dow Chem. Co. v. Am. Cyanamid Co.,
816 F.2d 617, 622 (Fed. Cir. 1987).

Patent Owner's Motion to Exclude

Petitioner's New Annotated Figures and Associated Arguments in Reply Should Be Excluded

- Petitioner violates 37 C.F.R. § 42.23(b).
- Petitioner's new arguments and evidence presented for the first time in Reply should not be considered.
 - Abelbeck annotated Fig. 12
 - Tolkien annotated Fig. 3
 - Exhibit 1036, Dr. Giachetti's Second Declaration

Thank You