

US Patent # 11,577,177

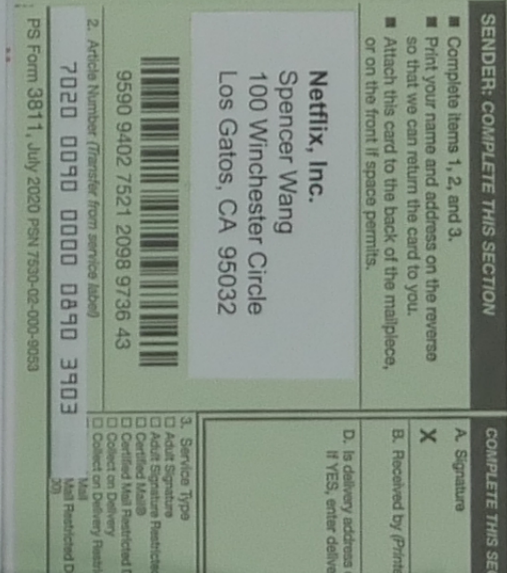
"A motorized, rotatable treadmill and a system for creating the illusion of user movement while the user is stationary with respect to an environment as the user walks or otherwise moves on an endless track of the treadmill. The user can then travel an unlimited distance in unlimited directions while remaining stationary in physical location. **The speed of the treadmill is precisely controlled and/or precisely matched with movement of a camera and a real-world speed of movement of the user and the distance the user travels on the belt to create the illusion of movement of the person being filmed. When the treadmill is provided within an LED virtual film set or green screen set, background imagery is added to further supplement the movement in a selected environment.**"

a system for creating the illusion of movement of a user. **The user may be inserted into a virtually rendered setting, a liveaction pre-filmed setting, or a combination thereof.** The system includes a motorized treadmill assembly having an endless belt operably supported on a rotatable turntable such that the treadmill assembly allows for unlimited directional movement of the belt and **a controller configured to synch the movement of the treadmill with a camera in real-time.** The treadmill assembly is configured to support the user thereon and wherein the treadmill assembly remains stationary, and the user movement is confined to a surface area of the belt, and the illusion of unrestricted movement is created."

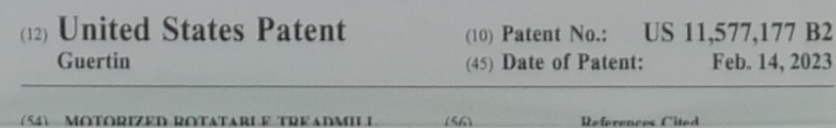
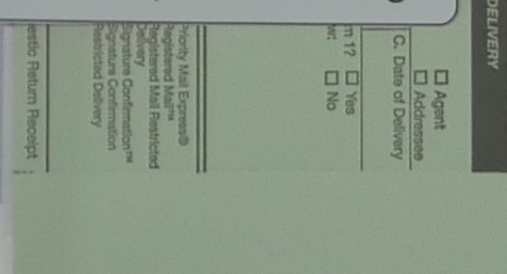
"camera movement is synched with a real-world speed and distance traveled by the belt for creating the illusion of unrestricted movement of the user."

"One or more audio, visual, or tactile cue sources are provided to the endless track, rotatable turntable, user or a combination thereof and actuating one or more audio, visual, or tactile cue sources to provide a physical signal to the user on the endless track to indicate one or more of a position of the user on the track, an initiation or ceasing of movement of the track, an initiation or ceasing of rotation of the turntable, or a cue or action related to the scene being filmed."

"The rotatable turntable is installable in an LED based virtual film set or green screen film set."



Netflix Inc - Spencer Wang



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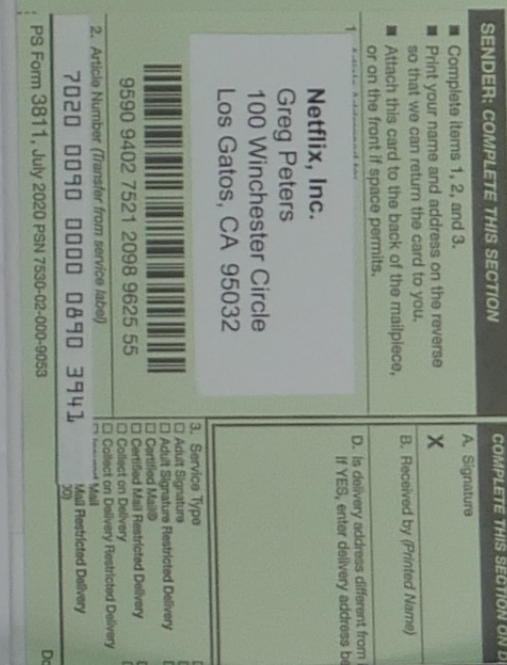
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"The rotatable turntable is installable in an LED based virtual film set or green screen film set."



Netflix Inc - Greg Peters

(12) United States Patent
Guertin

(10) Patent No.: US 11,577,177 B2
(45) Date of Patent: Feb. 14, 2023

(54) MOTORIZED ROTATABLE TREADMILL
AND SYSTEM FOR CREATING THE
ILLUSION OF MOVEMENT

(56) References Cited
U.S. PATENT DOCUMENTS

MOTORIZED ROTATABLE TREADMILL AND SYSTEM FOR CREATING THE ILLUSION OF MOVEMENT

US Patent # 11,577,177

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"The rotatable turntable is installable in an LED based virtual film set or green screen film set."

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(12) United States Patent
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(54) MOTORIZED ROTATABLE TREADMILL

MOTORIZED ROTATABLE TREADMILL AND SYSTEM FOR CREATING THE ILLUSION OF MOVEMENT

US Patent # 11,577,177

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Netflix Inc - Bryony Gagan

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(54) MOTORIZED ROTATABLE TREADMILL

MOTORIZED ROTATABLE TREADMILL AND SYSTEM FOR CREATING THE ILLUSION OF MOVEMENT

US Patent # 11,577,177

"A motorized, rotatable treadmill and a system for creating the illusion of user movement while the user is stationary with respect to an environment as the user walks or otherwise moves on an endless track of the treadmill. The user can then travel an unlimited distance in unlimited directions while remaining stationary in physical location. **The speed of the treadmill is precisely controlled and/or precisely matched with movement of a camera and a real-world speed of movement of the user and the distance the user travels on the belt to create the illusion of movement of the person being filmed. When the treadmill is provided within an LED virtual film set or green screen set, background imagery is added to further supplement the movement in a selected environment.**"

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"One or more audio, visual, or tactile cue sources are provided to the endless track, rotatable turntable, user or a combination thereof and actuating one or more audio, visual, or tactile cue sources to provide a physical signal to the user on the endless track to indicate one or more of a position of the user on the track, an initiation or ceasing of movement of the track, an initiation or ceasing of rotation of the turntable, or a cue or action related to the scene being filmed."

"The rotatable turntable is installable in an LED based virtual film set or green screen film set."

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The rotatable turntable is installable in an LED based virtual film set or green screen film set.

US Patent # 11,577,177

"A motorized, rotable treadmill and a system for creating the illusion of user movement while the user is stationary with respect to an environment as the user walks or otherwise moves on an endless track of the treadmill. The user can then travel an unlimited distance in unlimited directions while remaining stationary in physical location. The speed of the treadmill is precisely controlled and/or automatically matched with movement of a camera and a real-world speed of movement of the user and the distance the user travels on the belt to create the illusion of movement of the person being filmed. When the treadmill is provided within an LED virtual film set or green screen set, background imagery is added to further supplement the movement in a selected environment."

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"A motorized, rotatable treadmill and a system for creating the illusion of user movement while the user is stationary with respect to an environment as the user walks or otherwise moves on an endless track of the treadmill. The user can then travel an unlimited distance in unlimited directions while remaining stationary in physical location. The speed of the treadmill is precisely controlled and/or precisely matched with movement of a camera and a real-world speed of movement of the user and the distance the user travels on the belt to create the illusion of movement of the person being filmed. When the treadmill is provided within an LED virtual film set or green screen set, background imagery is added to further supplement the movement in a selected environment."

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"A motorized, rotatable treadmill and a system for creating the illusion of user movement while the user is stationary with respect to an environment as the user walks or otherwise moves on an endless loop of the treadmill. The user can then travel an unlimited distance in unlimited directions while remaining stationary in physical location. The speed of the treadmill is precisely controlled and/or precisely matched with movement of a camera and a real-world speed of movement of the user and the distance the user travels on the belt to create the illusion of movement of the person being filmed. When the treadmill is provided within an LED virtual film set or green screen set, background imagery is added to further supplement the movement in a selected environment."

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US Pat

"A motorized, rotatable treadmill movement while the user is stationary or otherwise moves on an endless unlimited distance in unlimited directions. The speed of the treadmill is proportional to the movement of the camera and the distance the user travels on the treadmill is proportional to the distance the person being filmed. When the user is on a set or green screen set, background images are projected onto the treadmill as the user moves." —James M. Smith, Jr., U.S. Patent 6,440,000

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by the belt for creating the ill

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The rotatable turntable is ins

US Patent #

*A motorized, rotatable treadmill and a system which allows the user to move forward or backward while the user is stationary with respect to the camera, or otherwise moves on an endless track of the treadmill, thereby allowing movement over unlimited distance in unlimited directions while being filmed.

The speed of the treadmill is precisely controlled by a computer so as to allow free movement of a camera and a real-world space. The speed of the treadmill is determined by the distance the user travels on the belt to create the desired motion of the camera relative to the person being filmed. When the treadmill is set to green screen set, background imagery can be projected onto the treadmill surface and the movement in a selected direction can be controlled by the speed of the treadmill.

"a system for creating the illusion of movement into a virtually rendered setting, a liveaction thereof. The system includes a motorized treadmill operably supported on a rotatable turntable, which allows for unlimited directional movement of the b

