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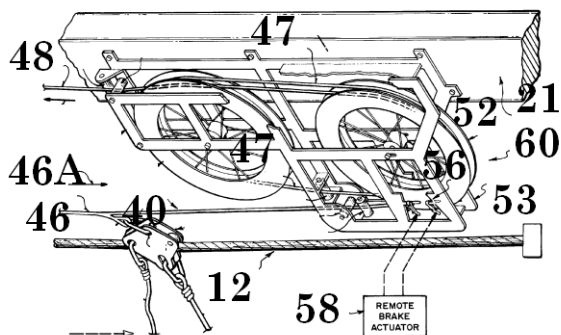
supports 14, 18 respectively. Cable 46B is shuttled back and forth between upper and lower reels 90, 92 as indicated by double-headed arrow 46S. Rider 32 is tethered to a point on cable 46B. As rider 32 traverses main cable 12, brake cable 46B is played out from upper reel 90 and taken up by lower reel 92. After rider 32 has finished the traverse, rider 32 is detached from cable 46B and cable 46B is rewound around upper reel 90 (i.e. brake cable 46B is played out from lower reel 92 and taken up by upper reel 90). The return path for cable 46B as it is rewound is depicted as dashed line 48B in figure 20. To keep cable 46B taut, a manually-operated or motorized winch can be coupled to either or both of reels 90, 92 to take up any slack in cable 46B as it is played out.

In any of the embodiments described above, at least one of the reels may be braked to slow the reel's rate of rotation and to lock the reel in a stationary position. The braking

mechanism can be operated by a zipline operator from a location remote from the braked reel, such as landing platform 20, so that the operator, while standing on landing platform 20, can visually monitor rider 32 throughout the ride and ensure that rider 32 is safely braked upon arrival at landing platform 20. In the endless loop brake line embodiment shown in figure 19, a brake is preferably coupled to lower reel 52, but may be coupled to upper reel 50 if desired. In the shuttle brake line embodiment shown in figure 20, a brake is coupled to upper reel 90 rather than to lower reel 92 since cable 46B is played out from upper reel 90.

Instead of, or in addition to, braking the reels, brake line 40 itself may be directly braked. For example, a zipline operator may grip brake line 40 with a gloved hand to arrest the motion of brake line 40. As a further example, a brake pad may be pressed against brake line 40 to slow the movement of brake line 40. To reduce potential slippage of the figure 19 endless loop brake line 40, as lower reel 52 is braked, an optional secondary reel 54 may be provided so that brake line 40 may be looped around both lower reel 52 and secondary reel 54. This configuration increases frictional contact between brake line 40 and reels 52, 54.

Figures 21 and 22 depict a braking reel assembly 60 incorporating lower reel frame 53, lower reel 52 and secondary reel 54. Secondary reel 54 may be rotatably mounted to reel frame 55 for rotation of reel 54 in the same plane as reel 52. Reel 54 may be slightly elevated relative to lower reel 52 as shown, or the axles of reels 52, 54 may be horizontally aligned. As best seen in figure 21, lower cable portion 46 of brake line 40, travelling in direction 46A, enters reel frame 53. Intermediate portion 47 of brake line 40 then loops



**Pat. 9,573,605**

Figure 21: Top, oblique, isometric view of a landing platform braking reel assembly.

*continued on next page*