GP4

Intelligent Slipform Paver



GOMACO®

The Worldwide Leader in Concrete Paving Technology

GP4 Slipform Paver

- The GOMACO GP4 is designed for paving up to 40 feet (12.19 m) wide and to accommodate multiple width changes.
- The GP4 is available as a two-track or four-track slipform paver.
- GOMACO's GP4 features a roller frame with dual-telescoping capabilities of up to seven feet (2.13 m) on each side of the paver, for a total of 14 feet (4.27 m) of automatic frame widening.
- The smart cylinders on the GP4 provide the width reference to the G+® controller and uses that information for steering setup and individual track speed control through radii.
- The GP4's smart leg positioning includes rotary-sensored slew drives on the pivot arms of each of the paver's four legs. The smart pivots on the legs provide the G+ control system with information on the angle of rotation and work together with the track rotation sensors to maintain the tracks in the straight-ahead line for steering.
- Rotary-sensored slew drives are also located on each of the slipform paver's four tracks for the ultimate in smart steering technology and extreme steering with the tracks having the ability to rotate farther than ever before.
- The GOMACO GP4 easily turns radii with smart leg positioning and smart track rotation.
- The GP4 slipform paver has been designed for easy transport. The paver can be switched to the transport mode by simply driving the legs around to the transport position. The operator can take this paver to the transport mode in minutes without assistance.
- The slipform paver was designed to be easy to operate with the G+ control system. G+ allows quiet running technology and also load-sensed hydraulics for maximum paving performance and optimized fuel efficiency.
- G+ Connect™ allows all the smart accessories and guidance system for the GOMACO paver to be easily interfaced.
- GOMACO Remote Diagnostics (GRD) is so much more than telematics, giving owners the visibility of how, when, and where their equipment is being used.
- Load-sensed hydraulics for maximum performance and optimized for fuel efficiency.
- New hose and cable management features for hydraulic hose routing and frame cable organization.
- Retractable console to reduce shipping width.
- T-beam mounting rail incorporated into the telescoping frame.
- Isolated operator's platform for operator comfort.
- Easy access to operator's platform from both sides and rear of the GP4.



HW-041857-D16

This GOMACO GP4 four-track paver with 3D machine guidance slipforms a country road 26 feet (7.92 m) wide and is equipped with a 5400 series mold and 5400 series tie bar inserter (TBI).



HW-031805-D1

This GOMACO GP4 two-track paver with 3D machine guidance slipforms an airport taxiway at 25 feet (7.62 m) wide and 22 inches (559 mm) thick.

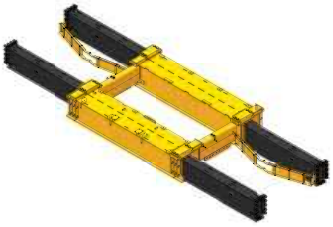
Patent Owner, Guntert & Zimmerman - Ex. 2004, p. 2

Transport Mode

The GP4 slipform paver is designed for easy transport. The operator can take this paver to the transport mode in minutes without assistance. The paver can be switched to the transport mode by simply driving the legs around to the transport position. After the legs are in the transport position, G+ travel is switched to "Transport" for complete control. A retractable, sliding console reduces the shipping width of the machine.



The GOMACO GP4 four-track is loaded onto a trailer for transporting.



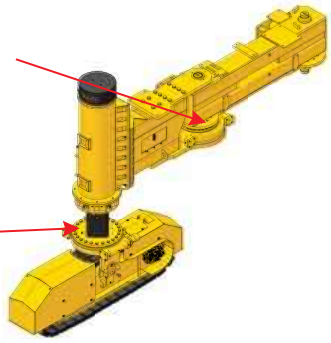
Smart Frame Widening

G+ knows the width of its dual-telescoping frame. Changing the width of the mainframe is accomplished with the Smart Cylinders and GOMACO roller frame. The GP4 can telescope up to seven feet (2.13 m) on each side of the frame for a total of 14 feet (4.27 m) of automatic frame widening.

The Smart Width provides easy, accurate width change setup and also a reference for G+ to control proper steering and track speeds while turning a radius at varying widths of the paver.

Smart Leg Positioning

Pivot arms for the paver legs feature rotary-sensored slew drives. These Smart Pivots provide the G+ controls with information on the angle of rotation, which coupled with the track rotation sensors, maintain the tracks in the straight-ahead line for steering.

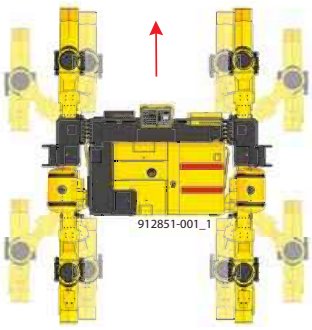


Smart Track Steering

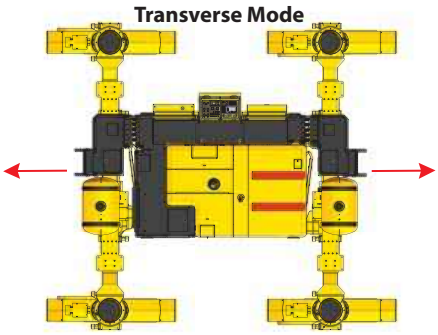
Track steering and rotation is accomplished with rotary-sensored slew drives. This smart track rotation provides the G+ controls with exact track location and position. Extreme steering is now possible, with the tracks having the ability to steer farther than ever before.

Smart leg pivoting and smart track rotation now lets the G+ system automatically control the direction and speed of each individual track as it travels through a radius.

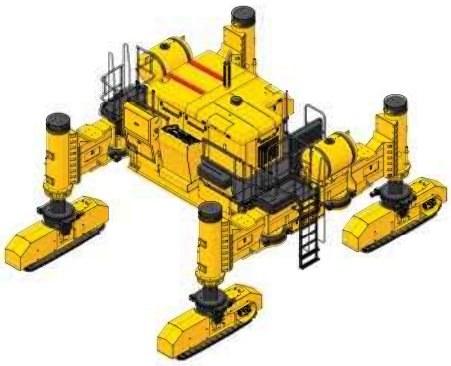
Sensored Leg Pivots and Track Rotation



Sensored steer feedback with sensored leg pivots provide continuous reference for the straight-ahead track positioning.



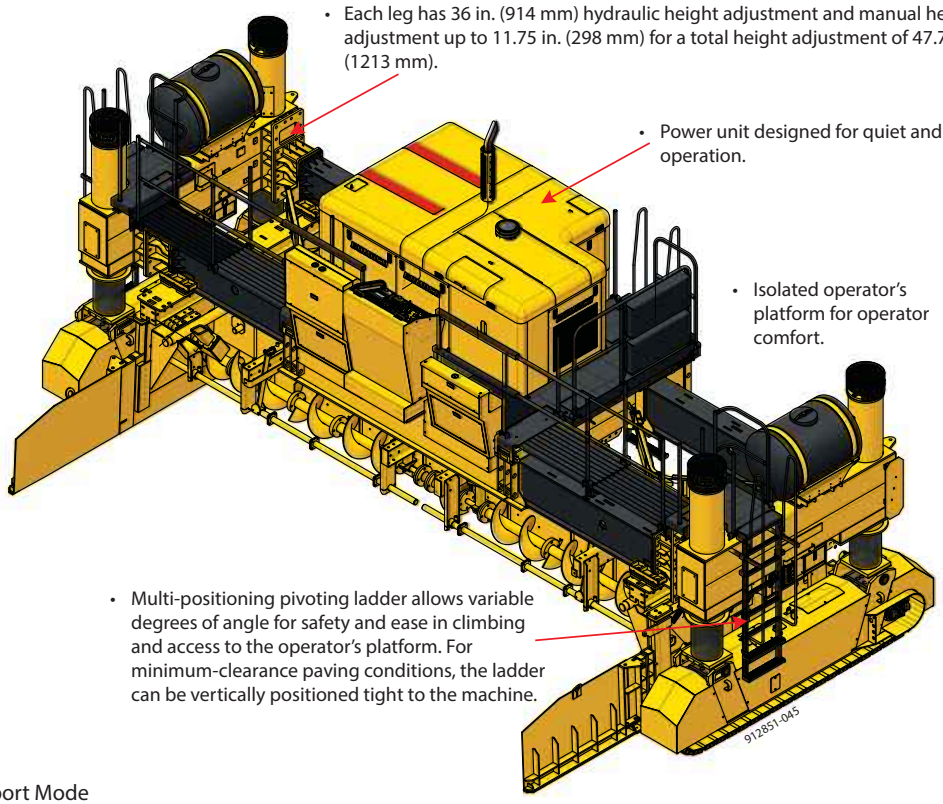
Full-steer tracks are turned perpendicular to the straight-ahead line. The G+ control system recognizes the track positioning and provides automatic steering control in the transverse mode.



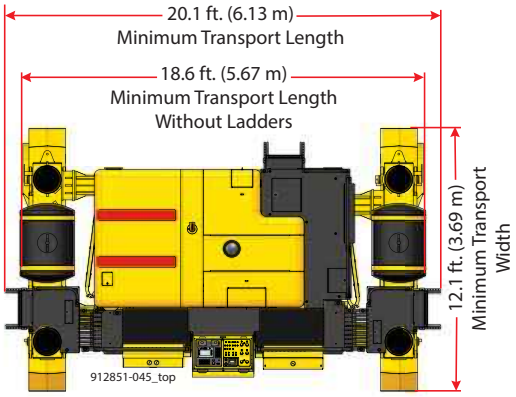
The GP4 design utilizes rotary-sensored slew drives for radial swing on the pivot arms and also for the track rotation.

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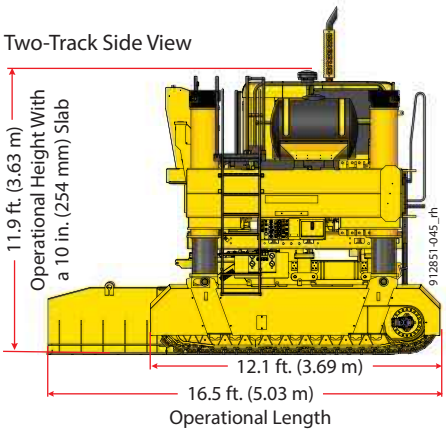
Two-Track GP4



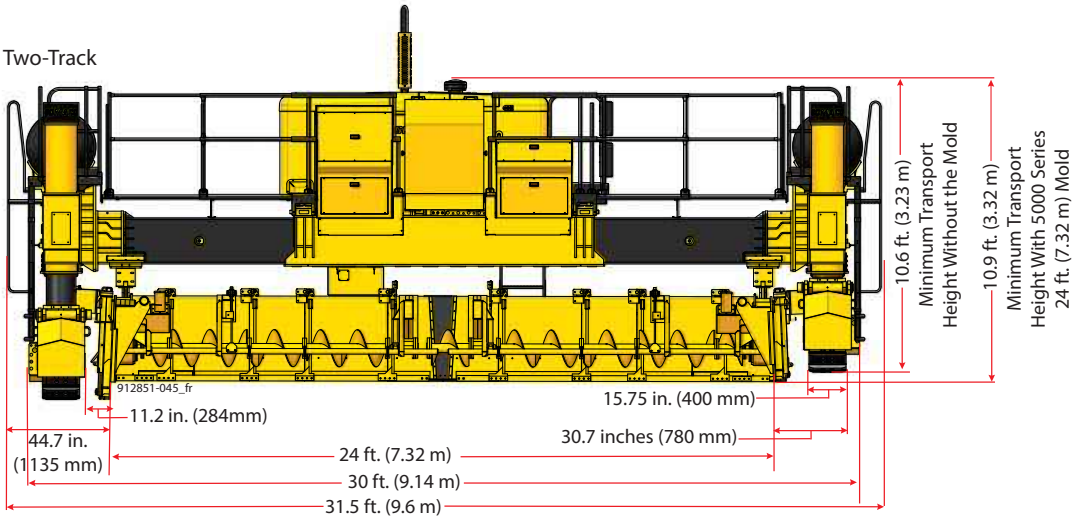
Two-Track Transport Mode



Two-Track Side View

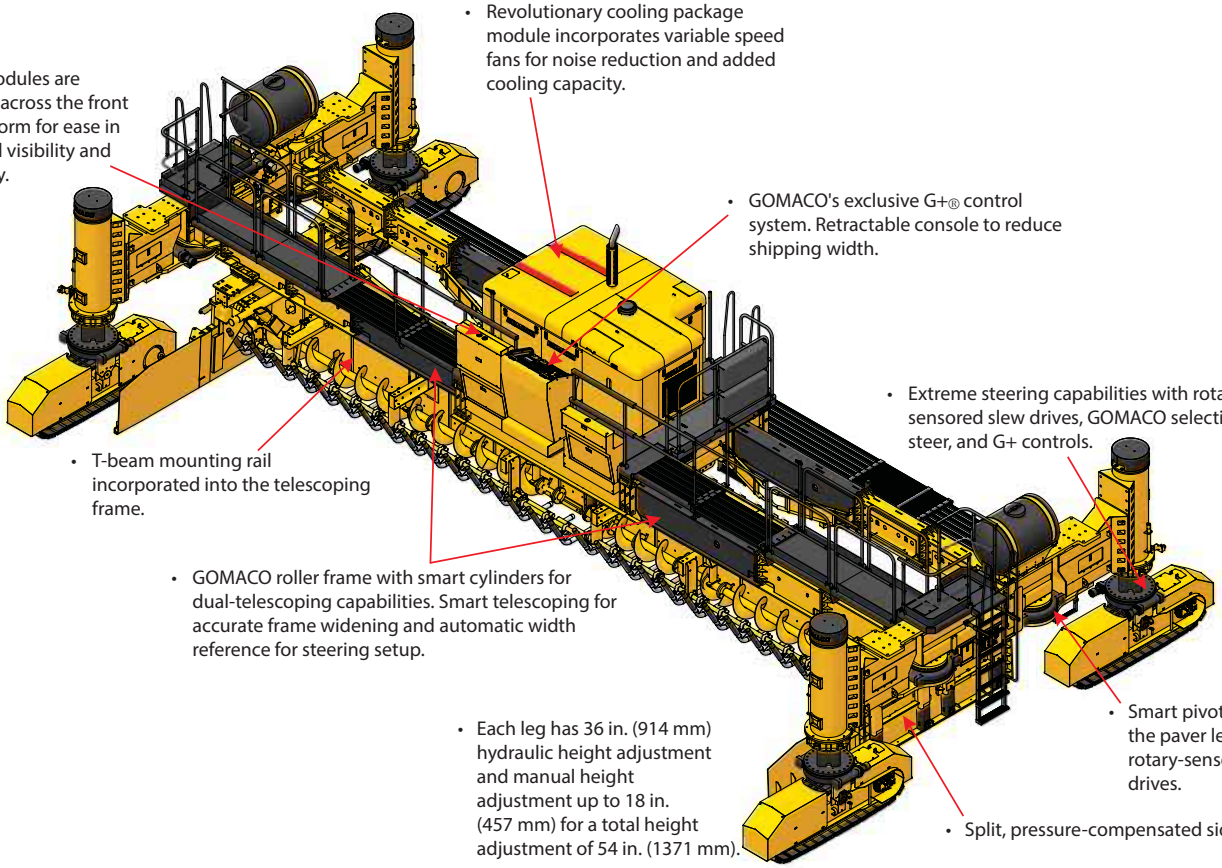


Two-Track

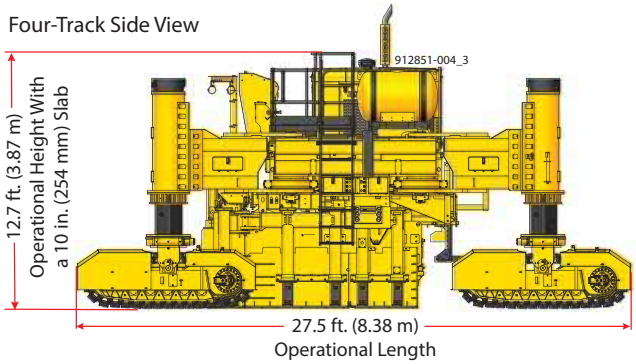


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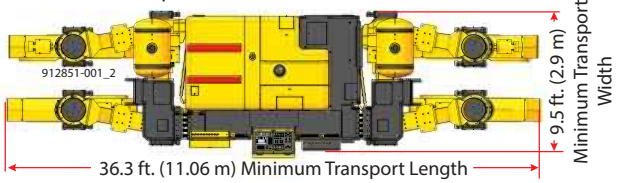
Four-Track GP4



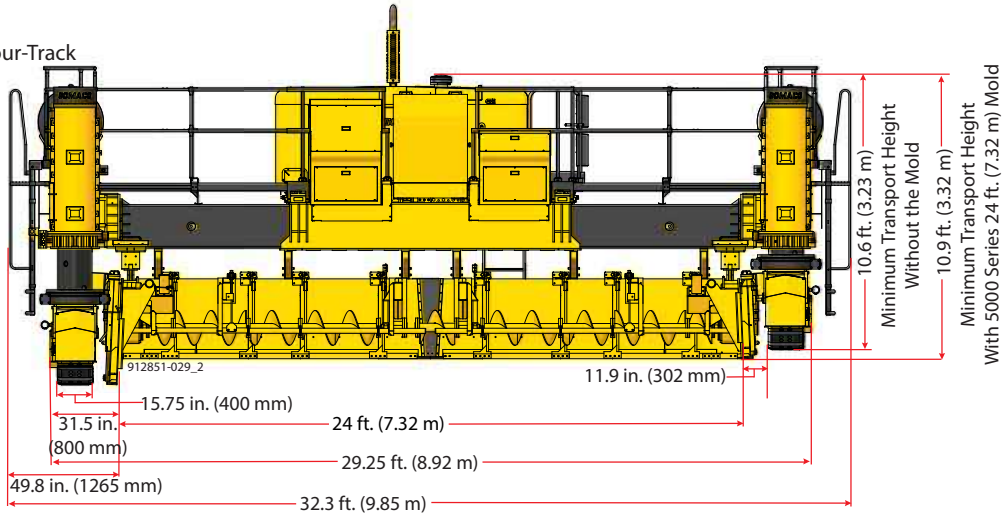
Four-Track Side View



Four-Track Transport Mode



Four-Track



Patent Owner, Guntert & Zimmerman - Ex. 2004, p. 5



HW-041855-D9

This four-track GOMACO GP4 features a plow on the front to evenly spread the concrete across the paving surface. The GP4 is also equipped with GRD (GOMACO Remote Diagnostics) telematics and diagnostics specifically designed for GOMACO equipment.



HW-101 710-D17

The GOMACO GP4 slipforms a 24 foot (7.32 m) wide section of interstate using 3D machine guidance. The GOMACO RTP-500 places the concrete in front of the paver.

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GP4 Specifications

ENGINE
Consult for options available.

SERVICE CAPACITIES
Fuel reservoir: 160 gal. (606 L).
Oil reservoir: 230 gal. (871 L).

AUTOMATED CONTROL SYSTEM
Type: Electronic-over-hydraulic.
Controls: GOMACO's exclusive G+® control system for paving accuracy and ease of operation. It features multi-language, metric or imperial settings, and a 6.5 in. (165 mm) anti-glare display screen.
Control indicators: Color graphical performance indicators allow operator to monitor control signals for machine guidance on stringline or 3D.

TELESCOPING FRAME
Telescoping: 20 in. (508 mm) deep modular roller frame telescopes up to 7 ft. (2.13 m) on both sides for a total of 14 ft. (4.27 m) of telescoping capability.
Paving widths: 40 ft. (12.19 m) maximum paving with frame inserts.

WATER SYSTEM
High-pressure water system: Two 110 gal. (416.4 L) tanks. High-pressure with trigger gun control and adjustable pressure unloader for up to 2000 psi.
Option: Two 150 gal. (567.8 L) tanks with hoses, nozzles, and 14.5 cfm (.41 cmm) air compressor for pressurized spray system.

VIBRATORS
Type: Hydraulic motor-in-head powering an eccentric weight.
Quantity: 16 vibrators and 30 vibrator circuits are standard.

AUGER SYSTEM
Type: Two strike-off auger circuits and two grout box auger circuits.

TAMPER SYSTEM
Type: Electronic-over-hydraulic circuitry. Hydraulically-powered split vertical tamping system.
Tamper speed: Adjustable up to 120 strokes per minute.

SLIPFORM MOLD
One right-hand drive section, one left-hand drive section, and one center insert with power transition adjuster (PTA) section. Balance of inserts per customer specifications. Hydraulically pressure-compensated sideplates with variable depth adjustments.

International mold: One right-hand drive section, one left-hand drive section, and one power transition adjuster (PTA) section. Balance of metric inserts per customer specifications. Hydraulically pressure-compensated sideplates with variable depth adjustments.

TWO-TRACK SYSTEM
Type: Two hydraulically powered, gear-driven crawler tracks.
Overall track length: Series 6 tracks, 12 ft. (3.66 m) includes track fender.
Track pad width: 15.75 in. (400 mm).
Track speed: Variable up to 28 fpm (8.53 mpm) paving, and auxiliary up to 85 fpm (25.91 mpm).
Ground pressure: 23 psi based on 80,100 (36,333 kg) machine with mold and weight evenly distributed.
Leg height adjustment: 36 in. (914 mm) hydraulic adjustment and manual adjustment up to 11.75 in. (298 mm) for a total height adjustment of 47.75 in. (1213 mm).

FOUR-TRACK SYSTEM
Type: Four hydraulically powered, gear-driven crawler tracks.
Overall track length: Series 6 tracks, 8.9 ft. (2.71 m) includes track fender.
Track pad width: 15.75 in. (400 mm).
Track speed: Variable up to 22 fpm (6.7 mpm) paving, and auxiliary up to 66 fpm (20 mpm).
Ground pressure: 21 psi based on 108,000 lb. (48,988 kg) machine with mold and weight evenly distributed.
Leg height adjustment: 36 in. (914 mm) hydraulic adjustment and manual adjustment up to 18 in. (457 mm) for a total height adjustment of 54 in. (1371 mm).

DIMENSIONS
Two-track:
Operational length: 16.5 ft. (5.03 m).
Operational width: 30 ft. (9.14 m) at a 24 ft. (7.32 m) paving width.
Operational height: 11.9 ft. (3.63 m).
Minimum transport length: 20.1 ft. (6.13 m) or 18.6 ft. (5.67 m) with the ladders removed.
Minimum transport width: 12.1 ft. (3.69 m).
Minimum transport height without mold: 10.6 ft. (3.23 m).
Minimum transport height with 24 ft. (7.32 m) 5000 Series mold: 10.9 ft. (3.32 m).
Four-track:
Operational length: 27.5 ft. (8.38 m).
Operational width: 29.25 ft. (8.92 m) at a 24 ft. (7.32 m) paving width.
Operational height: 12.7 ft. (3.87 m).
Minimum transport length: 36.3 ft. (11.06 m).
Minimum transport width: 9.5 ft. (2.9 m).
Minimum transport height without mold: 10.6 ft. (3.23 m).
Minimum transport height with 24 ft. (7.32 m) 5000 Series mold: 10.9 ft. (3.32 m)

WEIGHTS (approximate)
Two-Track transport weight: 61,000 lbs. (27,669 kg) without mold.
Two-Track operational weight: 80,100 lbs. (36,333 kg) with 5000 series mold.
Four-track transport weight: 88,000 lbs. (39,916 kg) without mold.
Four-track operational weight: 108,000 lbs. (48,988 kg) with 24 ft. (7.32 m) 5000 series open-front mold.
Note: Transport and operational weights and dimensions are variable, depending on the number of machine options.

ATTACHMENTS/OPTIONS
5400 series mold.
VHS, vertical hinged sideplates.
Auto-Float® attachment.
Detachable telescoping auger/strike-off mold.
Ratchet-style edge slump.
Frame extensions.
GSI® (GOMACO Smoothness Indicator).
Sideplate extensions for bar insertion.
Manual bar inserter.
Air bar inserter.
Hydraulic bar inserter.
5400 series tie bar inserter.
Frame-mounted tie bar inserter.
Bolt-on keyway attachments.
Spreader plow.
GOMACO Remote Diagnostics (GRD).
On-board camera.
Other options are available to customize the machine to accommodate applications and customer needs.

Patent Owner, Guntert & Zimmerman - Ex. 2004, p. 7



HW-041861-D9

The GOMACO GP4, four-track, slipforms highway expansion at 38 feet (11.58 m) wide. The GP4 is equipped with the 5400 series paving mold, an Auto-Float®, and 3D machine guidance.

Cover Image: HW-121703-D3
Manufactured under one or more of the following U.S. or foreign patents: 5,924,817; 5,941,659; 6,099,204; 6,450,048; 7,044,680; 7,284,472; 7,517,171; 7,845,878; 7,850,395; CA2,864,902; CA2,591,177; 8,855,967; 8,682,622; 9,051,696; 9,180,909; 9,200,414; 9,404,228; 9,428,869; 9,458,581; 9,464,716; 9,541,195, 9,624,626; 9,644,328; 9,633,162; 9,670,627; 9,739,019; 9,764,762; 9,869,063; 9,982,399; 9,963,836; 10,005,489; and patents pending.

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