

This heading comprises only the following subject-matter:

- . apparatus and methods for measuring and indicating movement of solid bodies relative to other solid bodies to determine linear and angular speed, acceleration, and motion-or-rest (*including* movement of a shaft relative to its housing, and measurement of speed of rotation of a meter wheel, to afford an indication of transmission of electricity, fluid-flow, heat and sound)
- . apparatus and methods for measuring and indicating rate of oil and fuel consumption, relative to distance travelled by vehicles, revolutions made, or speed
- . apparatus for continuously indicating or recording, on a vehicle, progress and position of the vehicle along a predetermined route by means driven by the movement of the vehicle
- . apparatus for indicating the direction in which moving parts are revolving
- . apparatus for registering on counters the ground traversed by vehicles, animals and other moving bodies

but does not include the following subject-matter, which is to be found in the headings indicated:

- . adaptations of odometers for registering fares and the working of machines—G1J, Expressing measurement &c; G4T, Checking cash, attendances &c
- . apparatus for giving records of time against distance or revolutions, from which speed, can be calculated—G1J, Expressing measurement &c
- . apparatus for recording the course or route actually steered—G1F, Surveying and navigating apparatus &c
- . arrangements for signalling position of engine-controlling valve gear—F1M, Steam engines &c
- . arrangements for synchronously reproducing continuous rotary movements at a distance by electrical means—G3N, Automatic electric control systems
- . arrangements utilizing non-contact-making radiation detectors sensitive to light, X-rays, gamma rays and elementary particle radiation and producing an electrical signal in response thereto—G1A, Radiation and radiation-utilising measurement &c
- . arrangements utilizing sound and like vibrations—G1G, Acoustic measuring
- . barometric gauges for determining rate of ascent and descent from variations of atmospheric pressure—G1L, Pressure gauges; engine indicators
- . construction of electric and magnetic speedometers (*other than* eddy-current)—G1N, Electrophysical and electrochemical measurement &c
- . determining speed by methods utilizing the reflection of electromagnetic waves—H4D, Wave-energy position finding &c
- . devices for attaching pedometers or other apparatus of this heading to wearing-apparel and person—A3H, Dress fastenings, jewellery &c
- . devices for inertial locking of seat belts—B7B, Road vehicle bodies &c
- . dynamo-electric transducers for sensing position and/or speed of movable body—G1N, Electrophysical and electrochemical measurement &c
- . electrical frequency meters—G1U, Measuring or testing electric or magnetic variables
- . escapements, movements, winding-mechanism, and other details applicable to clocks and watches—G3T, Timing; date indicating
- . gyroscopic apparatus—G1C, Gyroscopes
- . indicating cutting-speed in metal-cutting machines—*such headings as* B3K, Milling
- . indicating the position of an aircraft or other vehicle, on board the vehicle, by means controlled by radio signals—H4D, Wave-energy position finding &c
- . means external to a vehicle for producing signals from which the speed of the vehicle may be derived and forming part of a traffic control system—G4Q, Road, rail and like traffic control
- . metronomes for indicating a predetermined speed—G3T, Timing; date indicating
- . optical apparatus for determining, indicating and signalling speed and other rates of change—G2J, Optical apparatus &c
- . recording-counters from which records are periodically and automatically taken—G1J, Expressing measurement &c
- . route-progress indicators automatically operated at predetermined points en route *e.g.* at stopping places—G5C, Signs, indications, displays and advertising &c
- . signalling the slowing and accelerating of vehicles to other travellers—G4Q, Road, rail and like traffic control
- . speed indicators occurring in systems for producing synchronous movements, but not otherwise of interest—G3N, Automatic electric control systems G5R, Recording and playback
- . systems and transducers therefor, in which a mechanical movement is converted to an electric signal representing the movement—G1N, Electrophysical and electrochemical measurement &c

The exclusion references listed in this heading are not exhaustive. Reference should be made to the appropriate general heading/s for processes, materials, elements or devices which may be more widely applicable than can appropriately be classified in this heading

Relationship with the Universal Indexing Schedules (heading U1S)

U1S is used, subject to its indexing rules, to record uses and applications of inventions classified here, except insofar as these are inherent in the assigned terms of this heading

Operative date for Key entries

The operative date of the terms in this heading is earlier than that of Edition A

To facilitate searches for combinations of features, throughout this heading each feature is indexed for which a coded term is available, irrespective of novelty

- odometers, and route progress indicators and registers on vehicles operated by movement of vehicle—
- . adaptations of odometers for registering speed. *See* speedometers &c
- . combinations of distance registers with clocks and watches for speed measurements. *See* speedometers &c
- . counting-apparatus. *See* G4D, Counting-apparatus
- . dials, scale graduations, and other indicating and registering details of interest apart from odometers. *See* G1J, Expressing measurement &c
- . memorandum attachments. *See* B6A, Stationery, bookbinding &c
- K7 . indicating or recording continuously on vehicles progress and arrival at places along a determined route by means driven by the movement of the vehicle
- K8 . registering on counters the ground traversed by vehicles, animals, and other moving bodies
- K5 . revolution-direction indicators (indicating according to actual movement of revolving parts)
- speedometers and other speed and rate indicators and recorders (*including* rest-or-motion indicators and recorders)—
- . computing-apparatus for solving problems involving speed, time, distance, and rotation. *See* G4B, Mechanical calculating apparatus
- . counting-apparatus. *See* G4D, Counting-apparatus.
- . dials and other indicating, recording, and registering details of interest apart from speedometers. *See* G1J, Expressing measurement &c
- . indicating adjustment of motor-vehicle speed-controlling gear. *See* B7H, Motor vehicles &c
- . time-printing apparatus, construction of. *See* B6F, Selective printing &c; keyboards
- . *constructions of speed-responsive electric switches are indexed also under* H1N, Electric switches &c
- K3 . flux and rate meters for comparisons not involving time (*including* distance-fuel and similar measurements)
- . speedometers (*comprising only* the indicating, recording, and registering of speeds of revolution and of travel of solid bodies relative to other solid bodies)—
- . . measuring consumption of petrol and other fluids with respect to speed, mileage, and revolutions of vehicles and engines. *See* flux and rate meters &c
- . . acceleration, indicating. *See* kinds &c
- K2H . . adapting to coact with means for controlling motors and machinery
- . . . governors, construction of. *See* G3B, Speed governors
- . . changing gear, measuring and indicating suitable speeds for. *See* comparative speed &c
- . . combining movements of engine and machinery shafts to produce a derived movement for speed measuring. *See* kinds &c (differential &c)
- K2L . . comparative speed of elements while changing gear, indicating
- . . comparison apparatus involved in kinds or types employing observation of distant objects in relative motion. *See* kinds &c (sighting &c)
- . . comparison of speeds, effecting. *See* kinds &c (differential &c)
- K2N . . counting infractions of speed or acceleration limit
- K2B . . group and particular speed, alarms, indicators and signals for
- . . . alarms observed for speed determination by comparison methods. *See* kinds &c (differential &c)
- K2J . . indicating visibly at a distance, applications of devices for, (*other than* signals)
- . . . signalling-apparatus of interest apart from speedometers. *See* G4F, Signalling systems

- .. kinds or types—
 - ... electric and magnetic (*other than* eddy-current). *See* G1N, Electro-physical measurement
 - ... time-distance and time-revolution recorders. *See* G1J, Expressing measurement &c
- K1T .. accelerometers, retardometers, and speedometers actuated thereby
 - ... clinometers and gradient meters. *See* G1F, Surveying and navigating apparatus &c
 - ... gravity, measuring force of. *See* G1W, Weighing; dynamometers
- K1A .. acoustic and vibration-frequency
 - ... alarms and other audible indications of speed (*other than* those of acoustic speedometers). *See* group &c alarms &c *above*
- K1J .. average speed over any required interval, measuring directly
 - ... centrifugal (*other than* fluid)—
- K1B3 .. apparatus, unclassified
- K1B1 .. impact and inertia effects, utilizing
 - ... masses moving outwards in planes—
 - ... containing axis and rotating—
 - ... radial. *See* normal to axis *below*
 - ... bell-crank and cam member type
 - ... flexible arms carrying masses
 - ... inclined type (varying inclination of bilateral rigid members)
 - ... linkwork type (collapsing and expanding)
 - ... unclassified
 - ... normal to axis
 - ... other than normal and axial
- K1C .. differential, comparison, and relative-movement
 - ... comparison apparatus involved in kinds or types employing observation of distant objects. *See* sighting &c
- K1D .. electric and magnetic, eddy-current
 - ... systems in which eddy-current produces corresponding changes in another electric variable. *See* G1N, Electrophysical and electrochemical measurement &c. (Part A)
 - ... epicyclic-gear-and-resistance type. *See* fluid (fluid-drag)
 - ... fluid—
- K1E1 .. centrifugal (rotating body of liquid)
- K1E2 .. fluid-drag
- K1E3 .. pressure-difference (rotary and other pumps with pressure and current gauges)
 - ... current gauges construction of. *See* G1R, Measuring fluid flow
 - ... pressure gauges. *See* G1L, Pressure gauges; engine indicators
 - ... pumps, construction of. *See such headings as* F1C, Non-positive displacement pumps &c; F1F, Rotary positive displacement devices; F1W, Fluid-pressure reciprocating machines
- K1K .. friction drag between solids
- K1F .. impulse and momentum
 - ... miscellaneous—
- K1X1 .. clock-driven route indicator, compared with actual position
- K1X2 .. detonation velocity of explosives, determining
- K1X3 .. observing appearance of moving colours
- K1X4 .. observing celestial bodies
- K1X5 .. periodically-distinguished signals recurring in proportion to speed
- K1X6 .. ship-models, measuring speed of
- K1X7 .. speed derived from change of position over map of representation of moving vehicle automatically controlled from fixed observing stations
- K1G .. periodic counter (measuring-apparatus reset after invariable interval)
 - ... counting-apparatus, construction of. *See* G4D, Counting-apparatus
- K1M .. projectiles, measuring speed of
 - ... clock and watch stop-mechanism and short-time movement apparatus for timing flight of projectiles *See* G3T, Timing; date indicating
 - ... recording-apparatus, time-distance, for. *See* G1J, Expressing measurement &c
 - ... time-alarm signalling-apparatus for use in. *See* G3T, Timing; date indicating
 - ... sighting, by telescopic and other apparatus—
 - ... rate of change of bearing and range by direct observation, determining. *See* G2J, Optical apparatus &c (optical apparatus—range finders &c)
- K1N1 .. aerial and marine objects
- K1N2 .. objects on land
 - ... stroboscopic. *See* differential &c
- K1S .. velocity components, indicating and recording
- K2S .. locking speed index-hand in position (*other than* maximum devices)
- K2D .. maximum indicators

- .. miscellaneous—
- K2X1 .. auxiliary indicating dials for unspecified speed indicators
- K2X2 .. casings, arrangement and construction of
- K2X3 .. combination of two instruments indicating high and low speeds respectively
- K2X4 .. counting speed variations
- K2X5 .. indicating-attachments for unspecified engine governors
- K2X6 .. indicating-dials of different sizes, adapted for
- K2X15 .. indicating speed by liquid-in-tube means
- K2X7 .. mounting watch in front of casing
- K2X8 .. non-permanent records, provisions for
- K2X9 .. provided with scale of braking distance
- K2X10 .. recording speed upon movement of operating-parts
- K2X11 .. registering on counter aggregate duration of speeds by limiting or group values
- K2X12 .. speedometers fitted with eccentrically-mounted and separately-energized clock
- K2X13 .. testing speedometer by comparison with standard speedometer
- K2X14 .. testing vehicle speedometer by paper strip record produced by external means driven from vehicle wheels
- K2A .. modifying scale of readings and records (*other than* simple magnifying and diminishing)
- K2K .. registering distance and revolutions upon counters
- .. registering-operations essential to periodic-counter speed indicators. *See* kinds &c (periodic-counter)
- K2C .. rest or motion, indicating and recording apart from speed measurements
- .. revolution-direction indicators. *See* revolution-direction indicators
- .. retardation indicators. *See* kinds &c (accelerometers &c)
- K2P .. screw clamping-means for securing to vehicle
- .. signals for manual adjustment of speed alarm, and engine-control mechanism. *See* group &c alarms &c
- .. signals observed for speed determination by comparison methods. *See* kinds &c (differential &c)
- K2Q .. time-indicating hands for speedometers having speed-energized clockwork
- .. transmission mechanism for driving speed-determining parts—
- .. reproducing continuous rotary movements at a distance electrically. *See* G3N, Automatic electric control systems
- K2F1 .. electric and magnetic, eddy-current
- .. speedometers of electric and magnetic eddy-current types. *See* kinds &c (electric &c eddy-current)
- K2F2 .. other than electric and magnetic
- K2G .. with damping-devices
- .. vibration-absorbing mountings for instruments. *See* G1J, Expressing measurement &c (measurement-expressing &c—mounting &c)
- K2T .. with recording-apparatus
- .. time-distance and time-revolution recorders. *See* G1J, Expressing measurement &c