

G08C

TRANSMISSION SYSTEMS FOR MEASURED VALUES, CONTROL OR SIMILAR SIGNALS (fluid pressure transmitting systems [F15B](#); mechanical means for transferring the output of a sensing member into a different variable [G01D 5/00](#); mechanical control systems [G05G](#))

Definition statement

This place covers:

In the context of transmission systems for remotely controlling devices where the transmission systems are for measured values, control signals or the like:

- processing signals, e.g. differentiating or delaying;
- details of transmission systems: multiplexing, electric wired, wireless link, nonelectric (e.g. acoustic or optical);
- systems for transmitting the position of an object with respect to a predetermined reference system, e.g. tele-autographic systems;
- monitoring, preventing or correcting errors.

Relationships with other classification places

Subclass [H04B](#) covers the transmission of information-carrying signals, in general, the transmission being independent of the nature of the information.

Subclass [G08C](#) refers to transmission systems specially adapted for measured values, control signals or the like.

Subclass [H04L](#) covers transmission of signals having been supplied in digital form and includes telegraphic communication.

The borderline between subclasses [H04L](#) and [G08C](#) lies on whether subject matter is digital transmission techniques per se ([H04L](#)) or the transmission system combined with measurement or control ([G08C](#)).

References

Limiting references

This place does not cover:

Fluid pressure transmission system	F15B
Mechanical means for transferring the output of a sensing member into a different variable	G01D 5/00
Mechanical control systems	G05G

Application-oriented references

Examples of places where the subject matter of this place is covered when specially adapted, used for a particular purpose, or incorporated in a larger system:

Devices for measuring tyre pressure or temperature, specially adapted for vehicles mounted on the wheel or tyre	B60C 23/04
Means for transmitting measuring-signals from a borehole or a well to the surface, e.g. for logging while drilling	E21B 47/12
Transmitting seismic signals to recording or processing apparatus	G01V 1/22

Application-oriented references

Radiosondes for meteorological purposes	G01W 1/08
Signalling or calling systems	G08B
Order telegraph systems	G08B 9/00

Informative references

Attention is drawn to the following places, which may be of interest for search:

Measuring for diagnostic purposes	A61B 5/00
Remote-control arrangements specially adapted for toys, e.g. for toy vehicles	A63H 30/00
Measuring arrangements giving results other than momentary value of variable	G01D
Indicating or recording devices, for measuring volume or volume flow, e.g. for remote indication	G01F
Devices or apparatus for measuring force, stress, torque, work, mechanical power, mechanical efficiency or fluid pressure	G01L
Arrangements for measuring electric or magnetic variables	G01R
Systems involving sampling of the variable controlled	G05B
Position control in general	G05D
Input arrangements for transferring data to be processed into a form capable of being handled by the computer	G06F 3/00
Error detection; Monitoring on computers	G06F 11/00
Methods or arrangements for graph-reading or for converting the pattern of mechanical parameters, e.g. force or presence, into electrical signals	G06K 11/00
Individual entry or exit registers	G07C 9/00
Electronic locks operated with unidirectional data transmission between data carriers and locks	G07C 9/00182
Electronic locks operated with bidirectional data transmission between data carriers and locks	G07C 9/00309
Displaying; Advertising; Signs, Labels or name-plates; Seals	G09F
Generating electric pulses	H03K
Coding, decoding or code conversion, in general	H03M
Details of transmission systems, by remote control	H04B 1/202
Transmission systems employing electromagnetic waves other than radio waves, e.g. light, infrared	H04B 10/00
Monitoring for transmission systems in general	H04B 17/00
Detecting and preventing errors in digital transmission systems	H04L 1/00
Arrangements for remote connection or disconnection of substations or of equipment thereof	H04L 12/12
Home automation networks	H04L 12/2803
Controlling appliance services of a home automation network by calling their functionalities	H04L 12/2816
Reporting information sensed by appliance or service execution status of appliance services in a home automation network	H04L 12/2823

Monitoring for digital data switching networks	H04L 43/00
Telephone substation equipment for remote control of appliances	H04M 1/72415
Metering arrangements for telephonic communication	H04M 15/00
Details of television systems, whereby additional information being controlled by a remote control apparatus	H04N 21/42204
Special aspect of "selecting", i.e. arrangements in telecontrol or telemetry systems for selectively calling a substation from a main station	H04Q 9/00
Power saving techniques per se	H04W 52/02
Circuit arrangements for electric light sources in general, linked via wireless transmission	H05B 47/19

Glossary of terms

In this place, the following terms or expressions are used with the meaning indicated:

transmission	the dispatching, for reception elsewhere, of a signal, message or other form of information
tele-autographic system	system which transmits the handwriting
wireless	relating to a system of communication that does not use hardwired connections

G08C 13/00

Arrangements for influencing the relationship between signals at input and output, e.g. differentiating, delaying

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Transferring the output of a sensing member to an indicating or recording part not yielding momentary value	G01D 1/00
Systems for control of position involving comparison between actual and desired values	G05D 3/00

G08C 15/00

Arrangements characterised by the use of multiplexing for the transmission of a plurality of signals over a common path

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Multiplex transmission in general	H04J
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G08C 17/00

Arrangements for transmitting signals characterised by the use of a wireless electrical link

Definition statement

This place covers:

This group covers mainly systems for transmitting control signals via a wireless link, without specifying what kind of wireless link (IR, radio, ultrasonic, etc.) is being used.

Special rules of classification

The following features should be allocated the CPC codes for additional information below:

G08C 2201/00	Transmission systems of control signals via wireless link
G08C 2201/10	Power supply of remote control devices
G08C 2201/11	Energy harvesting
G08C 2201/112	Mechanical energy (vibration, piezoelectric)
G08C 2201/114	Solar power
G08C 2201/12	Power saving techniques of remote control/controlled devices
G08C 2201/20	Binding and programming of remote control devices
G08C 2201/21	Programming remote control devices via third means
G08C 2201/30	User interface
G08C 2201/31	Voice input
G08C 2201/32	Remote control based on movements, attitude of remote control device
G08C 2201/33	Remote control using macros, scripts
G08C 2201/34	Context aware guidance
G08C 2201/40	Remote control systems using repeaters, converters, gateways
G08C 2201/41	Remote control of gateways
G08C 2201/42	Transmitting/receiving remote control signals via a network
G08C 2201/50	Receiving/transmitting feedback (replies, status updates, acknowledgements) from the controlled devices
G08C 2201/51	Remote controlling of devices based on replies, status thereof, whereby the remote control device and the controlled device communicate via short range communication means
G08C 2201/60	Security, fault tolerance
G08C 2201/61	Password, biometric
G08C 2201/62	Rolling code
G08C 2201/63	Redundant transmissions
G08C 2201/70	Device selection
G08C 2201/71	Directional beams
G08C 2201/90	Additional features
G08C 2201/91	Remote control based on location and proximity
G08C 2201/92	Universal remote control

G08C 2201/93	Remote control using other portable devices (mobile phone, PDA, laptop)
G08C 2201/94	Smart cards

G08C 19/00

Electric signal transmission systems ([G08C 17/00](#) takes precedence)

Definition statement

This place covers:

This group covers mainly systems for transmitting signals via wires/cables.

References

Limiting references

This place does not cover:

Arrangements for transmitting signals characterised by the use of a wireless electrical link	G08C 17/00
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G08C 19/28

using pulse code

Definition statement

This place covers:

This group covers wireless control systems in which the remote control device or the controlled device is learning/teaching the code libraries/code sets.

G08C 19/36

using optical means to convert the input signal {(characterised by optical transfer means [G01D 5/26](#); optical analogue digital converters [G02F 7/00](#))}

References

Limiting references

This place does not cover:

Optical analog/digital converter	G01D 5/26 , G02F 7/00
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Informative references

Attention is drawn to the following places, which may be of interest for search:

Analogue/digital converters	H03M 1/00
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G08C 19/38

using dynamo-electric devices (operated by pulses [G08C 19/20](#))

References

Limiting references

This place does not cover:

Operated by pulses	G08C 19/20
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Informative references

Attention is drawn to the following places, which may be of interest for search:

Dynamo-electric machines	H02K
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G08C 21/00

Systems for transmitting the position of an object with respect to a predetermined reference system, e.g. tele-autographic system

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Converting the pattern of mechanical parameters, e.g. force or presence, into electrical signals	G06K 11/00
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G08C 23/00

Non-electrical signal transmission systems, e.g. optical systems

Definition statement

This place covers:

Non-electrical signal transmission systems for transmitting control signals.

G08C 23/02

using infrasonic, sonic or ultrasonic waves

Definition statement

This place covers:

This group covers non-electrical control signal transmission systems using infrasonic, sonic or ultrasonic waves

G08C 23/04

using light waves, e.g. infrared

Definition statement

This place covers:

This group covers systems for transmitting control signals via light waves, infrared.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Transmission systems employing electromagnetic waves other than radio waves, e.g. light, infrared	H04B 10/00
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