CPC COOPERATIVE PATENT CLASSIFICATION

G01V GEOPHYSICS ; GRAVITATIONAL MEASUREMENTS ; DETECTING MASSES OR OBJECTS (detecting or locating foreign bodies for diagnostic, surgical or person-identification purposes A61B ; means for indicating the location of accidentally buried, e.g. snow-buried persons A63B 29/02 ; investigating or analysing earth materials by determining their chemical or physical properties G01N ; measuring electric or magnetic variables in general, other than direction or magnitude of the earth`s field G01R ; electronic or nuclear magnetic resonance arrangements G01R 33/20 ; radar, sonar or analogous methods in general, detecting masses or objects involving these methods G01S)

NOTE

In this subclass, the geophysical methods apply both to the earth and to other celestial objects, e.g. planets.

Attention is drawn to the Notes following the title of class G01 .

WARNING

The following IPC groups are not used in the CPC scheme. Subject matter covered by these groups is classified in the following CPC groups:

`G01V 3/11 covered by G01V 3/10 B, G01V 3/10 C`

G01V 1/00 Seismology ; Seismic or acoustic prospecting or detecting

NOTE

Groups G01V 1/44 to G01V 1/52 take precedence over groups G01V 1/001 to G01V 1/393 G01V 1/42

WARNING

Group G01V 1/159 does not correspond to former or current IPC groups. Concordance ECLA:IPC for this group is as follows: - G01V 1/159 : G01V 1/02

G01V 1/001 . { Acoustic presence detection (measurement of sonic vibrations G01H ; alarm systems G08B) }

G01V 1/003 . { Seismic data acquisition in general, e.g. survey design (G01V 1/3808 , G01V 1/42 takes precedence) }

G01V 1/005 . . { with exploration systems emitting special signals, e.g. frequency swept signals, pulse sequences or slip sweep arrangements }

G01V 1/006 . . { generating single signals by using more than one generator, e.g. beam steering or focussing arrays (G01V 1/13 , G01V 1/3861 takes precedence) }

G01V 1/008 . { Earthquake measurement or prediction (event detection for microseismic events G01V 1/288) }

G01V 1/02 . Generating seismic energy ({ G01V 1/003 takes precedence } ; blasting in general

F42 ; nuclear explosives G21J)

G01V 1/04 . . Details

G01V 1/047 . . . Arrangements for coupling the generator to the ground

G01V 1/0475 . . . . { for controlling "Ground Force" }

G01V 1/053 . . . . for generating transverse waves

G01V 1/06 . . . Ignition devices (G01V 1/393 takes precedence)

G01V 1/08 . . . . involving time-delay devices

G01V 1/09 . . . Transporting arrangements, e.g. on vehicles (G01V 1/38 takes precedence)

G01V 1/104 . . using explosive charges (G01V 1/157 takes precedence)

G01V 1/108 . . . by deforming or displacing surfaces of enclosures

G01V 1/112 . . . . for use on the surface of the earth

G01V 1/116 . . . where pressurised combustion gases escape from the generator in a pulsating manner, e.g. for generating bursts

G01V 1/13 . . . Arrangements or disposition of charges to produce a desired pattern in space or time

G01V 1/133 . . using fluidic driving means, e.g. highly pressurised fluids; { using implosion } (G01V 1/104 takes precedence)

G01V 1/135 . . . by deforming or displacing surfaces of enclosures { , e.g. by hydraulically driven vibroseis™ }

G01V 1/137 . . . which fluid escapes from the generator in a pulsating manner, e.g. for generating bursts { , airguns }

G01V 1/143 . . using mechanical driving means { e.g. motor driven shaft } (G01V 1/104 , G01V 1/133 take precedence)

G01V 1/145 . . . by deforming or displacing surfaces { , e.g. by mechanically driven vibroseis™ }

G01V 1/147 . . . using impact of dropping masses

G01V 1/153 . . . using rotary unbalanced masses

G01V 1/155 . . . using reciprocating masses

G01V 1/157 . . using spark discharges ; using exploding wires (spark gaps, { non-enclosed } discharge apparatus, not otherwise provided for H01T)

G01V 1/159 . . { using piezoelectric or magnetostrictive driving means (generating mechanical vibrations by using piezoelectric or magnetostrictive effect in general, B06B 1/06 , B06B 1/08) }

G01V 1/16 . Receiving elements for seismic signals (electromechanical transducers H04R) ; Arrangements or adaptations of receiving elements

G01V 1/162 . . { Details }

G01V 1/164 . . . { Circuits therefore }

G01V 1/166 . . . { Arrangements for coupling receivers to the ground }

G01V 1/168 . . { Deployment of receiver elements (G01V 1/3843 takes precedence) }

G01V 1/18 . . Receiving elements, e.g. seismometer, geophone { or torque detectors, for localised single point measurements }

G01V 1/181 . . . { Geophones }

G01V 1/182 . . . . { with moving coil }

G01V 1/183 . . . . { with moving magnet }

G01V 1/184 . . . . { Multi-component geophones }

G01V 1/185 .... { with adaptable orientation, e.g. gimballed }
G01V 1/186 ... { Hydrophones }
G01V 1/187 .... { Direction-sensitive hydrophones }
G01V 1/188 .... { with pressure compensating means }
G01V 1/189 ... { Combinations of different types of receiving elements }
G01V 1/20 .. Arrangements of receiving elements, e.g. geophone pattern
G01V 1/201 ... { Constructional details of seismic cables, e.g. streamers (integrated optoseismic systems G01V 1/226 ; line connectors in general H01R , transducer mountings in general G10K 11/004) }
G01V 1/202 .... { Connectors, e.g. for force, signal or power }
G01V 1/208 .... { having a continuous structure (detecting traffic G08G , transducers in general G10K) }

G01V 1/22 . Transmitting seismic signals to recording or processing apparatus (signal transmitting systems in general G08C ; transmission systems in general H04B)
G01V 1/223 .. { Radioseismic systems }
G01V 1/226 .. { Optoseismic systems }

G01V 1/24 . Recording seismic data (transforming one recording into another G01V 1/32 ; recording measured values in general G01D)
G01V 1/242 .. { Seismographs }
G01V 1/245 .. { Amplitude control for seismic recording (control of amplification in general H03G) }
G01V 1/247 .. { Digital recording of seismic data, e.g. in acquisition units or nodes }
G01V 1/26 .. Reference-signal-transmitting devices, e.g. indicating moment of firing of shot

G01V 1/28 . Processing seismic data, e.g. analysis, for interpretation, for correction (G01V 1/48 takes precedence)
G01V 1/282 .. { Application of seismic models, synthetic seismograms }
G01V 1/284 .. { Application of the shear wave component and/or several components of the seismic signal }
G01V 1/286 ... { Mode conversion }
G01V 1/288 .. { Event detection in seismic signals, e.g. microseismics } (earthquakes G01V 1/008 ; G01V 1/36 takes precedence)
G01V 1/30 .. Analysis (G01V 1/50 takes precedence)
G01V 1/301 ... { for determining seismic cross-sections or geostructures }
G01V 1/302 .... { in 3D data cubes }
G01V 1/303 ... { for determining velocity profiles or travel times }
G01V 1/305 .... { Travel times }
G01V 1/306 ... { for determining physical properties of the subsurface, e.g. impedance, porosity or attenuation profiles }
G01V 1/307 ... { for determining seismic attributes, e.g. amplitude, instantaneous phase or frequency, reflection strength or polarity }
G01V 1/308 ... { Time lapse or 4D effects, e.g. production related effects to the formation (fluid flow per se E21B47) }
G01V 1/32 .. Transforming one recording into another { or one representation into another }
G01V 1/325 ... { Transforming one representation into another }

G01V 1/34 . . Displaying seismic recordings { or visualisation of seismic data or attributes }
G01V 1/345 . . . { Visualisation of seismic data or attributes, e.g. in 3D cubes }
G01V 1/36 . . Effecting static or dynamic corrections on records, e.g. correcting spread ; Correlating seismic signals ; Eliminating effects of unwanted energy
G01V 1/362 . . . { Effecting static or dynamic corrections; Stacking }
G01V 1/364 . . . { Seismic filtering (G01V 1/37 takes precedence) }
G01V 1/366 . . . . { by correlation of seismic signals }
G01V 1/368 . . . . { Inverse filtering }
G01V 1/37 . . . specially adapted for seismic systems using continuous agitation of the ground, { e.g. using pulse compression of frequency swept signals for enhancement of received signals }
G01V 1/375 . . . . { Correlating received seismic signals with the emitted source signal }

G01V 1/38 . specially adapted for water-covered areas (G01V 1/28 , { G01V 1/42 } take precedence)]
G01V 1/3808 . . { Seismic data acquisition, e.g. survey design (in general G01V 1/003) }
G01V 1/3817 . . { Positioning of seismic devices }
G01V 1/3826 . . . { dynamic steering, e.g. by paravanes or birds }
G01V 1/3835 . . . { measuring position, e.g. by GPS or acoustically }
G01V 1/3843 . . { Deployment of seismic devices, e.g. of streamers (equipment for marine deployment in general B63B) }
G01V 1/3852 . . . { to the seabed }
G01V 1/3861 . . { control of source arrays, e.g. for far field control }
G01V 1/387 . . Reducing secondary bubble pulse, i.e. reducing the detected signals resulting from the generation and release of gas bubbles after the primary explosion
G01V 1/393 . . Means for loading explosive underwater charges, e.g. combined with ignition devices

G01V 1/40 . specially adapted for well-logging
G01V 1/42 . . using generators in one well and receivers elsewhere or vice-versa (G01V 1/52 takes precedence)
G01V 1/44 . . using generators and receivers in the same well (G01V 1/52 takes precedence)
G01V 1/46 . . . Data acquisition
G01V 1/48 . . . Processing data
G01V 1/50 . . . . Analysing data
G01V 1/52 . . Structural details
G01V 1/523 . . . { Damping devices }

G01V 3/00 **Electric or magnetic prospecting or detecting** (by optical means G01V 8/00) **; Measuring magnetic field characteristics of the earth, e.g. declination, deviation** (for navigation, for surveying G01C ; { measuring direction or magnitude of magnetic fields or magnetic flux in general G01R 33/02 })

G01V 3/02 . operating with propagation of electric current
G01V 3/04 . . using dc
G01V 3/06 . . using ac

G01V 3/08 . operating with magnetic or electric fields produced or modified by objects or geological structures or by detecting devices (with electromagnetic waves G01V 3/12 ; measuring the magnetic field characteristics of the earth G01V 3/40)

G01V 3/081 .. { the magnetic field is produced by the objects or geological structures (characterised by the method of magnetic field measurement G01R 33/00) }

G01V 3/082 .. { operating with fields produced by spontaneous potentials, e.g. electrochemical or produced by telluric currents (G01V 3/26 takes precedence) }

G01V 3/083 .. { Controlled source electromagnetic [CSEM] surveying }

G01V 3/087 .. { the earth magnetic field being modified by the objects or geological structures }

G01V 3/088 .. { operating with electric fields (G01V 3/082 takes precedence) }

G01V 3/10 .. using induction coils

G01V 3/101 ... { by measuring the impedance of the search coil; by measuring features of a resonant circuit comprising the search coil (measuring impedance or characteristics derived therefrom G01R 27/00 , e.g. quality factor G01R 27/26) }

G01V 3/102 .... { by measuring amplitude }

G01V 3/104 ... { using several coupled or uncoupled coils (G01V 3/101 takes precedence) }

G01V 3/105 .... { forming directly coupled primary and secondary coils or loops }

G01V 3/107 ..... { using compensating coil or loop arrangements }

G01V 3/108 .... { the emitter and the receiver coils or loops being uncoupled by positioning them perpendicularly to each other }

G01V 3/12 . operating with electromagnetic waves { (operating with millimetre waves G01V 8/005) }

G01V 3/14 . operating with electron or nuclear magnetic resonance

G01V 3/15 . specially adapted for use during transport, e.g. by a person, vehicle or boat

G01V 3/16 .. specially adapted for use from aircraft (G01V 3/165 to G01V 3/175 take precedence)

G01V 3/165 .. operating with magnetic or electric fields produced or modified by the object or by the detecting device (with electromagnetic waves G01V 3/17)

G01V 3/17 .. operating with electromagnetic waves { (operating with millimetre waves G01V 8/005) }

G01V 3/175 .. operating with electron or nuclear magnetic resonance

G01V 3/18 . specially adapted for well-logging

G01V 3/20 .. operating with propagation of electric current

G01V 3/22 ... using dc

G01V 3/24 ... using ac

G01V 3/26 .. operating with magnetic or electric fields produced or modified either by the surrounding earth formation or by the detecting device (with electromagnetic waves G01V 3/30)

G01V 3/265 ... { Operating with fields produced by spontaneous potentials, e.g. electrochemicals or produced by telluric currents }

G01V 3/28 ... using induction coils

G01V 3/30 .. operating with electromagnetic waves

G01V 3/32 .. operating with electron or nuclear magnetic resonance

G01V 3/34 . . Transmitting data to recording or processing apparatus ; Recording data

G01V 3/36 . Recording data (G01V 3/34 takes precedence)

G01V 3/38 . Processing data, e.g. for analysis, for interpretation, for correction (computing in general G06)

G01V 3/40 . specially adapted for measuring magnetic field characteristics of the earth

G01V 5/00 **Prospecting or detecting by the use of nuclear radiation, e.g. of natural or induced radioactivity** (determining the properties of materials G01N ; measuring nuclear radiation G01T)

WARNING

Pending reclassification, the subgroups of this group are not complete; see also this group

G01V 5/0008 . { Detecting hidden objects, e.g. weapons, explosives (sorting of materials or articles according to radioactive properties B07C 5/342 ; investigating or analysing materials by the use of wave or particle radiation G01N 23/00) }

G01V 5/0016 . . { Active interrogation, i.e. using an external radiation source, e.g. using pulsed, continuous or cosmic rays }

G01V 5/0025 . . . { Measuring scattered radiation }

G01V 5/0033 . . . { Mixed interrogation beams, e.g. using more than one type of radiation beam }

G01V 5/0041 . . . { Multiple energy techniques using one type of radiation, e.g. X-rays of different energies (multi-beam applications, e.g. X-rays and neutrons G01V 5/0033 ; spectroscopic applications G01V 5/0016) }

G01V 5/005 . . . { using Tomography, e.g. CT or SPECT (detector details in CT applications G01T 1/2985) }

G01V 5/0058 . . . { using stereoscopic means }

G01V 5/0066 . . . { having relative motion between the source, detector and object other than by conveyor (G01V 5/005 takes precedence) }

G01V 5/0075 . . { Passive interrogation (for hand, feet or portals G01T 1/167 ; for contaminated surface areas G01T 1/169) }

G01V 5/0083 . . { utilizing a network, e.g. a remote expert, accessing remote data or the like }

G01V 5/0091 . . { detecting special nuclear material [SNM], e.g. Uranium-235, Uranium-233 or Plutonium-239 }

G01V 5/02 . specially adapted for surface logging, e.g. from aircraft

G01V 5/025 . . { specially adapted for use from aircraft }

G01V 5/04 . specially adapted for well-logging

G01V 5/045 . . { Transmitting data to recording or processing apparatus; Recording data }

G01V 5/06 . . for detecting naturally radioactive minerals

G01V 5/08 . . using primary nuclear radiation sources or X-rays { e.g. for inducing radioactivity; investigating or analysing materials by the use of wave or particle radiation, e.g. X-rays, neutrons G01N 23/00 }

G01V 5/085 . . . { using another radioactive source }

G01V 5/10 . . . using neutron sources { neutron generating tubes H05H 5/00 ; neutron sources using isotopes G21G 4/00 }

G01V 5/101 . . . . { and detecting the secondary Y-rays produced in the surrounding layers of the bore hole }

G01V 5/102 . . . . . { the neutron source being of the pulsed type }

G01V 5/104 . . . . { and detecting secondary Y-rays as well as reflected or back-scattered neutrons }

G01V 5/105 . . . . . { the neutron source being of the pulsed type }

G01V 5/107 . . . . { and detecting reflected or back-scattered neutrons }

G01V 5/108 . . . . . { the neutron source being of the pulsed type }

G01V 5/12 . . . using gamma or X-ray sources { gamma sources using isotopes G21G 4/00 ; X-ray tubes H01J 35/00 }

G01V 5/125 . . . . { and detecting the secondary gamma- or X-rays in different places along the bore hole }

G01V 5/14 . . . using a combination of several sources, e.g. a neutron and a gamma source

G01V 5/145 . . . . { using a neutron source combined with a gamma- or X-ray source }

G01V 7/00 **Measuring gravitational fields or waves ; Gravimetric prospecting or detecting**

G01V 7/005 . { using a resonating body or device, e.g. string (G01V 7/08 to G01V 7/12 take precedence; measuring resonant frequency of mechanical vibrations G01H 13/00 ; measuring frequency per se G01R 23/00) }

G01V 7/02 . Details

G01V 7/04 . . Electric, photoelectric, or magnetic indicating or recording means

G01V 7/06 . . Analysis or interpretation of gravimetric records

G01V 7/08 . using balances (balances in general G01G)

G01V 7/10 . . using torsion balances, e.g. Eötvös balance

G01V 7/12 . using pendulums

G01V 7/14 . using free-fall time

G01V 7/16 . specially adapted for use on moving platforms, e.g. ship, aircraft

G01V 8/00 **Prospecting or detecting by optical means** (measurement of characteristics of light G01J ; optical scanning systems G02B 26/10 ; discharge tubes detecting the presence of radiation H01J 40/00 , H01J 47/00 ; semiconductor devices sensitive to light H01L 31/00)

NOTE

This group covers the use of {millimetre waves, } infra-red, visible or ultra-violet light.

G01V 8/005 . { operating with millimetre waves, e.g. measuring the black losey radiation }

G01V 8/02 . Prospecting

G01V 8/10 . Detecting, e.g. by using light barriers (by reflection from the object G01S 17/00 ; counting of objects carried by a conveyer G06M 7/00 ; signalling or calling arrangements G08B ; detecting movement of traffic to be counted or controlled G08G 1/01 ; proximity switches H03K 17/945 , H03K 17/965)

G01V 8/12 . . using one transmitter and one receiver

G01V 8/14 . . . using reflectors

G01V 8/16 . . . using optical fibres

G01V 8/18 . . . using mechanical scanning systems

G01V 8/20 . . using multiple transmitters or receivers

G01V 8/22 . . . using reflectors

G01V 8/24 . . . using optical fibres

G01V 8/26 . . . using mechanical scanning systems

G01V 9/00 **Prospecting or detecting by methods not provided for in groups G01V 1/00 to G01V 8/00**

G01V 9/002 . { using fields or radiation detectable only by persons susceptible therefor, e.g. radio-esthesis, dowsing }

G01V 9/005 . { by thermal methods, e.g. after generation of heat by chemical reactions }

G01V 9/007 . { by detecting gases or particles representative of underground layers at or near the surface (analysing earth materials G01N 33/24 ; analysing gases per se G01N) }

G01V 9/02 . Determining existence or flow of underground water

G01V 11/00 **prospecting or detecting by methods combining techniques covered by two or more of main groups G01V 1/00 to G01V 9/00**

G01V 11/002 . { Details, e.g. power supply systems for logging instruments, transmitting or recording data, specially adapted for well logging, also if the prospecting method is irrelevant (means for transmitting well survey signals E21B 47/12 ; signal transmission systems in general G08C ; transmission in general H04B) }

G01V 11/005 . . { Devices for positioning logging sondes with respect to the borehole wall (centralising devices for drilling rods or pipes E21B 17/10 ; setting or locking tools in boreholes E21B 23/00 ; Locating objects in boreholes E21B 47/09) }

G01V 11/007 . { using the seismo-electric effect }

G01V 13/00 **Manufacturing, calibrating, cleaning, or repairing instruments or devices covered by the preceding groups**

G01V 15/00 **Tags attached to, or associated with, an object, in order to enable detection of the object** (record carriers for use with machines G06K 19/00 ; signs, labels G09F)

G01V 99/00 **Subject matter not provided for in other groups of this subclass**

G01V 99/005 . { Geomodels or geomodelling, not related to particular measurements }

G01V 2001/00 **Seismology ; Seismic or acoustic prospecting or detecting**

NOTE

Groups G01V 1/44 to G01V 1/52 take precedence over groups G01V 1/001 to G01V 1/393 G01V 1/42

WARNING

Group G01V 1/159 does not correspond to former or current IPC groups. Concordance ECLA:IPC for this group is as follows: - G01V 1/159 : G01V 1/02

G01V 2001/16 . Receiving elements for seismic signals (electromechanical transducers H04R) ; Arrangements or adaptations of receiving elements

G01V 2001/20 . . Arrangements of receiving elements, e.g. geophone pattern

G01V 2001/201 . . . { Constructional details of seismic cables, e.g. streamers (integrated optoseismic systems G01V 1/226 ; line connectors in general H01R , transducer mountings in general G10K 11/004) }

G01V 2001/204 . . . . Reinforcements, e.g. by tensioning cables

G01V 2001/205 . . . . Internal damping

G01V 2001/207 . . . . Buoyancy

G01V 2001/40 . specially adapted for well-logging

G01V 2001/52 . . Structural details

G01V 2001/526 . . . Mounting of transducers

G01V 2003/00 **Electric or magnetic prospecting or detecting** (by optical means G01V 8/00) **; Measuring magnetic field characteristics of the earth, e.g. declination, deviation** (for navigation, for surveying G01C ; { measuring direction or magnitude of magnetic fields or magnetic flux in general G01R 33/02 })

G01V 2003/08 . operating with magnetic or electric fields produced or modified by objects or geological structures or by detecting devices (with electromagnetic waves G01V 3/12 ; measuring the magnetic field characteristics of the earth G01V 3/40)

G01V 2003/083 . . { Controlled source electromagnetic [CSEM] surveying }

G01V 2003/084 . . . Sources

G01V 2003/085 . . . Receivers

G01V 2003/086 . . . Processing

G01V 2200/00 **Details of seismic or acoustic prospecting or detecting in general**

G01V 2200/10 . Miscellaneous details

G01V 2200/12 . . Clock synchronization-related issues

G01V 2200/14 . . Quality control

G01V 2200/16 . . Measure-while-drilling or logging-while-drilling

G01V 2210/00 **Details of seismic processing or analysis**

G01V 2210/10 . Aspects of acoustic signal generation or detection
G01V 2210/12 .. Signal generation
G01V 2210/121 ... Active source
G01V 2210/1212 .... Shot
G01V 2210/1214 .... Continuous
G01V 2210/1216 .... Drilling-related
G01V 2210/123 ... Passive source, e.g. micro-seismics
G01V 2210/1232 .... Earthquakes
G01V 2210/1234 .... Hydrocarbon reservoir, e.g. spontaneous or induced fracturing
G01V 2210/1236 .... Acoustic daylight, e.g. cultural noise
G01V 2210/125 ... Virtual source
G01V 2210/127 ... Cooperating multiple sources
G01V 2210/129 ... Source location
G01V 2210/1291 .... Air
G01V 2210/1293 .... Sea
G01V 2210/1295 .... Land surface
G01V 2210/1297 .... Sea bed
G01V 2210/1299 .... Subsurface, e.g. in borehole or below weathering layer or mud line
G01V 2210/14 .. Signal detection
G01V 2210/142 ... Receiver location
G01V 2210/1421 .... Air
G01V 2210/1423 .... Sea
G01V 2210/1425 .... Land surface
G01V 2210/1427 .... Sea bed
G01V 2210/1429 .... Subsurface, e.g. in borehole or below weathering layer or mud line
G01V 2210/144 ... with functionally associated receivers, e.g. hydrophone and geophone pairs
G01V 2210/16 .. Survey configurations
G01V 2210/161 ... Vertical seismic profiling [VSP]
G01V 2210/163 ... Cross-well
G01V 2210/165 ... Wide azimuth
G01V 2210/167 ... Very long offset
G01V 2210/169 ... Sparse arrays

G01V 2210/20 . Trace signal pre-filtering to select, remove or transform specific events or signal components, i.e. trace-in/trace-out (removing noise G01V 2210/32)
G01V 2210/21 .. Frequency-domain filtering, e.g. band pass
G01V 2210/22 .. Time-domain filtering
G01V 2210/23 .. Wavelet filtering
G01V 2210/24 .. Multi-trace filtering
G01V 2210/242 ... F-k filtering, e.g. ground roll
G01V 2210/244 ... Radon transform
G01V 2210/25 .. Transform filter for merging or comparing traces from different surveys

G01V 2210/26 . . Modulation or demodulation, e.g. for continuous sources
G01V 2210/27 . . Other pre-filtering

G01V 2210/30 . Noise handling (trace signal pre-filtering G01V 2210/20)
G01V 2210/32 . . Noise reduction
G01V 2210/322 . . . Trace stacking
G01V 2210/324 . . . Filtering
G01V 2210/3242 . . . . Flow noise
G01V 2210/3244 . . . . Cultural noise
G01V 2210/3246 . . . . Coherent noise, e.g. spatially coherent or predictable
G01V 2210/3248 . . . . Incoherent noise, e.g. white noise
G01V 2210/34 . . Noise estimation (quality control G01V 2200/14)
G01V 2210/36 . . Noise recycling, i.e. retrieving non-seismic information from noise
G01V 2210/38 . . Noise characterisation or classification

G01V 2210/40 . Transforming data representation (for pre-filtering purposes G01V 2210/20)
G01V 2210/41 . . Arrival times, e.g. of P or S wave or first break
G01V 2210/42 . . Waveform, i.e. using raw or pre-filtered trace data
G01V 2210/43 . . Spectral
G01V 2210/44 . . F-k domain
G01V 2210/45 . . F-x or F-xy domain
G01V 2210/46 . . Radon transform
G01V 2210/47 . . Slowness, e.g. tau-pi
G01V 2210/48 . . Other transforms

G01V 2210/50 . Corrections or adjustments related to wave propagation (noise handling G01V 2210/30)
G01V 2210/51 . . Migration
G01V 2210/512 . . . Pre-stack
G01V 2210/514 . . . Post-stack
G01V 2210/52 . . Move-out correction
G01V 2210/522 . . . Dip move-out [DMO]
G01V 2210/53 . . Statics correction, e.g. weathering layer or transformation to a datum
G01V 2210/532 . . . Dynamic changes in statics, e.g. sea waves or tidal influences
G01V 2210/54 . . Borehole-related corrections
G01V 2210/542 . . . Casing
G01V 2210/544 . . . Invasion zone
G01V 2210/55 . . Array focusing ; Phased arrays
G01V 2210/56 . . De-ghosting ; Reverberation compensation
G01V 2210/57 . . Trace interpolation or extrapolation, e.g. for virtual receiver ; Anti-aliasing for missing receivers
G01V 2210/58 . . Media-related
G01V 2210/582 . . . Dispersion
G01V 2210/584 . . . Attenuation

G01V 2210/586 . . . Anisotropic media
G01V 2210/588 . . . Non-linear media
G01V 2210/59 . . Other corrections

G01V 2210/60 . Analysis
G01V 2210/61 . . Analysis by combining or comparing a seismic data set with other data
G01V 2210/612 . . . Previously recorded data, e.g. time-lapse or 4D
G01V 2210/6122 . . . . Tracking reservoir changes over time, e.g. due to production
G01V 2210/6124 . . . . . Subsidence, i.e. upwards or downwards
G01V 2210/614 . . . Synthetically generated data
G01V 2210/616 . . . Data from specific type of measurement
G01V 2210/6161 . . . . Seismic or acoustic, e.g. land or sea measurements
G01V 2210/6163 . . . . Electromagnetic
G01V 2210/6165 . . . . Gravitational
G01V 2210/6167 . . . . Nuclear
G01V 2210/6169 . . . . using well-logging
G01V 2210/62 . . Physical property of subsurface
G01V 2210/622 . . . Velocity, density or impedance
G01V 2210/6222 . . . . Velocity ; travel time
G01V 2210/6224 . . . . Density
G01V 2210/6226 . . . . Impedance
G01V 2210/624 . . . Reservoir parameters
G01V 2210/6242 . . . . Elastic parameters, e.g. Young, Lam? or Poisson
G01V 2210/6244 . . . . Porosity
G01V 2210/6246 . . . . Permeability
G01V 2210/6248 . . . . Pore pressure
G01V 2210/626 . . . with anisotropy
G01V 2210/63 . . Seismic attributes, e.g. amplitude, polarity, instant phase
G01V 2210/632 . . . Amplitude variation versus offset or angle of incidence [AVA, AVO, AVI]
G01V 2210/64 . . Geostructures, e.g. in 3D data cubes
G01V 2210/641 . . . Continuity of geobodies
G01V 2210/642 . . . Faults
G01V 2210/643 . . . Horizon tracking
G01V 2210/644 . . . Connectivity, e.g. for fluid movement
G01V 2210/645 . . . Fluid contacts
G01V 2210/646 . . . Fractures
G01V 2210/647 . . . Gas hydrates
G01V 2210/65 . . Source localisation, e.g. faults, hypocenters or reservoirs
G01V 2210/66 . . Subsurface modeling
G01V 2210/661 . . . Model from sedimentation process modeling, e.g. from first principles
G01V 2210/663 . . . Modeling production-induced effects
G01V 2210/665 . . . using geostatistical modeling

G01V 2210/6652 . . . . Kriging
G01V 2210/667 . . . Determining confidence or uncertainty in parameters
G01V 2210/67 . . Wave propagation modeling
G01V 2210/671 . . . Raytracing
G01V 2210/673 . . . Finite-element ; Finite-difference
G01V 2210/675 . . . Wave equation ; Green's functions
G01V 2210/677 . . . Spectral ; Pseudo-spectral
G01V 2210/679 . . . Reverse-time modeling or coalescence modelling, i.e. starting from receivers

G01V 2210/70 . Other details related to processing
G01V 2210/72 . . Real-time processing
G01V 2210/74 . . Visualisation of seismic data