

# CPC COOPERATIVE PATENT CLASSIFICATION

## G PHYSICS (NOTES omitted)

### INSTRUMENTS

#### G01 MEASURING; TESTING (NOTES omitted)

#### G01V GEOPHYSICS; GRAVITATIONAL MEASUREMENTS; DETECTING MASSES OR OBJECTS; TAGS (means for indicating the location of accidentally buried, e.g. snow-buried persons [A63B 29/02](#))

##### NOTES

1. This subclass covers radar, sonar, lidar or analogous systems specifically designed for geophysical use. Radar, sonar, lidar or analogous systems, or details of such systems, if of a general interest, are also classified in subclass [G01S](#).
2. In this subclass, the following term is used with the meaning indicated:
  - "tags" means arrangements cooperating with a detecting field, e.g. near field, and designed to produce a specific detectable effect; "tags" also means active markers capable of generating a detectable field.
3. In this subclass, the geophysical methods apply both to the earth and to other celestial objects, e.g. planets.
4. Attention is drawn to the Notes following the title of class [G01](#).

##### WARNINGS

1. The following IPC groups are not in the CPC scheme. The subject matter for these IPC groups is classified in the following CPC groups:  
[G01V 3/11](#) covered by [G01V 3/101](#), [G01V 3/104](#)
2. In this subclass non-limiting references (in the sense of paragraph 39 of the Guide to the IPC) may still be displayed in the scheme.

<b>1/00</b>	<b>Seismology; Seismic or acoustic prospecting or detecting</b>	1/09	. . . Transporting arrangements, e.g. on vehicles ( <a href="#">G01V 1/38</a> takes precedence)
	<b>NOTE</b>	1/104	. . using explosive charges ( <a href="#">G01V 1/157</a> takes precedence)
	Groups <a href="#">G01V 1/44</a> - <a href="#">G01V 1/52</a> take precedence over groups <a href="#">G01V 1/001</a> - <a href="#">G01V 1/393</a> <a href="#">G01V 1/42</a>	1/108	. . . by deforming or displacing surfaces of enclosures
1/001	. {Acoustic presence detection (measurement of sonic vibrations <a href="#">G01H</a> ; alarm systems <a href="#">G08B</a> )}	1/112	. . . . for use on the surface of the earth
1/003	. {Seismic data acquisition in general, e.g. survey design ( <a href="#">G01V 1/3808</a> , <a href="#">G01V 1/42</a> takes precedence)}	1/116	. . . where pressurised combustion gases escape from the generator in a pulsating manner, e.g. for generating bursts
1/005	. . {with exploration systems emitting special signals, e.g. frequency swept signals, pulse sequences or slip sweep arrangements}	1/13	. . . Arrangements or disposition of charges to produce a desired pattern in space or time
1/006	. . {generating single signals by using more than one generator, e.g. beam steering or focussing arrays ( <a href="#">G01V 1/13</a> , <a href="#">G01V 1/3861</a> takes precedence)}	1/133	. . using fluidic driving means, e.g. highly pressurised fluids; {using implosion} ( <a href="#">G01V 1/104</a> takes precedence)
1/008	. {Earthquake measurement or prediction (event detection for microseismic events <a href="#">G01V 1/288</a> )}	1/135	. . . by deforming or displacing surfaces of enclosures {, e.g. by hydraulically driven vibroseis™}
1/02	. Generating seismic energy {( <a href="#">G01V 1/003</a> takes precedence)}	1/137	. . . which fluid escapes from the generator in a pulsating manner, e.g. for generating bursts {, airguns}
1/04	. . Details	1/143	. . using mechanical driving means {, e.g. motor driven shaft} ( <a href="#">G01V 1/104</a> , <a href="#">G01V 1/133</a> take precedence)
1/047	. . . Arrangements for coupling the generator to the ground	1/145	. . . by deforming or displacing surfaces {, e.g. by mechanically driven vibroseis™}
1/0475	. . . . {for controlling "Ground Force"}	1/147	. . . using impact of dropping masses
1/053	. . . . for generating transverse waves	1/153	. . . using rotary unbalanced masses
1/06	. . . Ignition devices ( <a href="#">G01V 1/393</a> takes precedence)	1/155	. . . using reciprocating masses
1/08	. . . . involving time-delay devices	1/157	. . using spark discharges; using exploding wires

- 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](#))}
- 1/16 . Receiving elements for seismic signals; Arrangements or adaptations of receiving elements
- 1/162 . . {Details}
- 1/164 . . . {Circuits therefore}
- 1/166 . . . {Arrangements for coupling receivers to the ground}
- 1/168 . . {Deployment of receiver elements ([G01V 1/3843](#) takes precedence)}
- 1/18 . . Receiving elements, e.g. seismometer, geophone {or torque detectors, for localised single point measurements}
- 1/181 . . . {Geophones}
- 1/182 . . . . {with moving coil}
- 1/183 . . . . {with moving magnet}
- 1/184 . . . . {Multi-component geophones}
- 1/185 . . . . {with adaptable orientation, e.g. gimbaled}
- 1/186 . . . {Hydrophones}
- 1/187 . . . . {Direction-sensitive hydrophones}
- 1/188 . . . . {with pressure compensating means}
- 1/189 . . . {Combinations of different types of receiving elements}
- 1/20 . . Arrangements of receiving elements, e.g. geophone pattern
- 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](#))}
- 1/202 . . . . {Connectors, e.g. for force, signal or power}
- 2001/204 . . . . {Reinforcements, e.g. by tensioning cables}
- 2001/205 . . . . {Internal damping}
- 2001/207 . . . . {Buoyancy}
- 1/208 . . . . {having a continuous structure (detecting traffic [G08G](#), transducers in general [G10K](#))}
- 1/22 . Transmitting seismic signals to recording or processing apparatus
- 1/223 . . {Radioseismic systems}
- 1/226 . . {Optoseismic systems}
- 1/24 . Recording seismic data
- 1/242 . . {Seismographs}
- 1/245 . . {Amplitude control for seismic recording (control of amplification in general [H03G](#))}
- 1/247 . . {Digital recording of seismic data, e.g. in acquisition units or nodes}
- 1/26 . . Reference-signal-transmitting devices, e.g. indicating moment of firing of shot
- 1/28 . Processing seismic data, e.g. analysis, for interpretation, for correction ([G01V 1/48](#) takes precedence)
- 1/282 . . {Application of seismic models, synthetic seismograms}
- 1/284 . . {Application of the shear wave component and/or several components of the seismic signal}
- 1/286 . . . {Mode conversion}
- 1/288 . . {Event detection in seismic signals, e.g. microseismics (earthquakes [G01V 1/008](#); [G01V 1/36](#) takes precedence)}
- 1/30 . . Analysis ([G01V 1/50](#) takes precedence)
- 1/301 . . . . {for determining seismic cross-sections or geostructures}
- 1/302 . . . . . {in 3D data cubes}
- 1/303 . . . . {for determining velocity profiles or travel times}
- 1/305 . . . . . {Travel times}
- 1/306 . . . . {for determining physical properties of the subsurface, e.g. impedance, porosity or attenuation profiles}
- 1/307 . . . . {for determining seismic attributes, e.g. amplitude, instantaneous phase or frequency, reflection strength or polarity}
- 1/308 . . . . {Time lapse or 4D effects, e.g. production related effects to the formation ([fluid flow per se E21B 47/00](#))}
- 1/32 . . Transforming one recording into another {or one representation into another}
- 1/325 . . . . {Transforming one representation into another}
- 1/34 . . Displaying seismic recordings {or visualisation of seismic data or attributes}
- 1/345 . . . . {Visualisation of seismic data or attributes, e.g. in 3D cubes}
- 1/36 . . Effecting static or dynamic corrections on records, e.g. correcting spread; Correlating seismic signals; Eliminating effects of unwanted energy
- 1/362 . . . . {Effecting static or dynamic corrections; Stacking}
- 1/364 . . . . {Seismic filtering ([G01V 1/37](#) takes precedence)}
- 1/366 . . . . . {by correlation of seismic signals}
- 1/368 . . . . . {Inverse filtering}
- 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}
- 1/375 . . . . . {Correlating received seismic signals with the emitted source signal}
- 1/38 . . specially adapted for water-covered areas ([G01V 1/28](#), [G01V 1/42](#) take precedence)
- 1/3808 . . {Seismic data acquisition, e.g. survey design (in general [G01V 1/003](#))}
- 1/3817 . . {Positioning of seismic devices}
- 1/3826 . . . . {dynamic steering, e.g. by paravanes or birds}
- 1/3835 . . . . {measuring position, e.g. by GPS or acoustically}
- 1/3843 . . {Deployment of seismic devices, e.g. of streamers (equipment for marine deployment in general [B63B](#))}
- 1/3852 . . . . {to the seabed}
- 1/3861 . . {control of source arrays, e.g. for far field control}
- 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
- 1/393 . . Means for loading explosive underwater charges, e.g. combined with ignition devices
- 1/40 . . specially adapted for well-logging
- 1/42 . . using generators in one well and receivers elsewhere or vice versa ([G01V 1/52](#) takes precedence)
- 1/44 . . using generators and receivers in the same well ([G01V 1/52](#) takes precedence)

- 1/46 . . . Data acquisition
- 1/48 . . . Processing data
- 1/50 . . . . Analysing data
- 1/52 . . Structural details
- 1/523 . . . {Damping devices}
- 2001/526 . . . {Mounting of transducers}
- 3/00 Electric or magnetic prospecting or detecting; Measuring magnetic field characteristics of the earth, e.g. declination, deviation**
- 3/02 . operating with propagation of electric current
- 3/04 . . using dc
- 3/06 . . using ac
- 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](#))
- 3/081 . . {the magnetic field is produced by the objects or geological structures (characterised by the method of magnetic field measurement [G01R 33/00](#))}
- 3/082 . . {operating with fields produced by spontaneous potentials, e.g. electrochemical or produced by telluric currents ([G01V 3/26](#) takes precedence)}
- 3/083 . . {Controlled source electromagnetic [CSEM] surveying}
- 2003/084 . . . {Sources}
- 2003/085 . . . {Receivers}
- 2003/086 . . . {Processing}
- 3/087 . . {the earth magnetic field being modified by the objects or geological structures}
- 3/088 . . {operating with electric fields ([G01V 3/082](#) takes precedence)}
- 3/10 . . using induction coils
- 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](#))}
- 3/102 . . . . {by measuring amplitude}
- 3/104 . . . {using several coupled or uncoupled coils ([G01V 3/101](#) takes precedence)}
- 3/105 . . . . {forming directly coupled primary and secondary coils or loops}
- 3/107 . . . . . {using compensating coil or loop arrangements}
- 3/108 . . . . {the emitter and the receiver coils or loops being uncoupled by positioning them perpendicularly to each other}
- 3/12 . operating with electromagnetic waves {(operating with millimetre waves [G01V 8/005](#))}
- 3/14 . operating with electron or nuclear magnetic resonance
- 3/15 . specially adapted for use during transport, e.g. by a person, vehicle or boat
- 3/16 . . specially adapted for use from aircraft ([G01V 3/165](#) - [G01V 3/175](#) take precedence)
- 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](#))
- 3/17 . . operating with electromagnetic waves {(operating with millimetre waves [G01V 8/005](#))}
- 3/175 . . operating with electron or nuclear magnetic resonance
- 3/18 . . specially adapted for well-logging
- 3/20 . . operating with propagation of electric current
- 3/22 . . . using dc
- 3/24 . . . using ac
- 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](#))
- 3/265 . . . {Operating with fields produced by spontaneous potentials, e.g. electrochemicals or produced by telluric currents}
- 3/28 . . . using induction coils
- 3/30 . . operating with electromagnetic waves
- 3/32 . . operating with electron or nuclear magnetic resonance
- 3/34 . . Transmitting data to recording or processing apparatus; Recording data
- 3/36 . Recording data ([G01V 3/34](#) takes precedence)
- 3/38 . Processing data, e.g. for analysis, for interpretation, for correction
- 3/40 . specially adapted for measuring magnetic field characteristics of the earth
- 5/00 Prospecting or detecting by the use of nuclear radiation, e.g. of natural or induced radioactivity**
- 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](#))}
- 5/0016 . . {Active interrogation, i.e. using an external radiation source, e.g. using pulsed, continuous or cosmic rays}
- 5/0025 . . . {Measuring scattered radiation}
- 5/0033 . . . {Mixed interrogation beams, e.g. using more than one type of radiation beam}
- 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](#))}
- 5/005 . . . {using Tomography, e.g. CT or SPECT (detector details in CT applications [G01T 1/2985](#))}
- 5/0058 . . . {using stereoscopic means}
- 5/0066 . . . {having relative motion between the source, detector and object other than by conveyor ([G01V 5/005](#) takes precedence)}
- 5/0069 . . . {Measuring induced radiation, e.g. thermal neutron activation analysis (investigating or analysing materials by the use of neutrons [G01N 23/222](#))}
- 5/0075 . . {Passive interrogation (for hand, feet or portals [G01T 1/167](#); for contaminated surface areas [G01T 1/169](#))}
- 5/0083 . . {utilizing a network, e.g. a remote expert, accessing remote data or the like}
- 5/0091 . . {detecting special nuclear material [SNM], e.g. Uranium-235, Uranium-233 or Plutonium-239}
- 5/02 . specially adapted for surface logging, e.g. from aircraft
- 5/025 . . {specially adapted for use from aircraft}
- 5/04 . specially adapted for well-logging
- 5/045 . . {Transmitting data to recording or processing apparatus; Recording data}

- 5/06 . . for detecting naturally radioactive minerals
- 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](#))}
- 5/085 . . . {using another radioactive source}
- 5/10 . . . using neutron sources {(neutron generating tubes [H05H 5/00](#); neutron sources using isotopes [G21G 4/00](#))}
- 5/101 . . . . {and detecting the secondary Y-rays produced in the surrounding layers of the bore hole}
- 5/102 . . . . . {the neutron source being of the pulsed type}
- 5/104 . . . . {and detecting secondary Y-rays as well as reflected or back-scattered neutrons}
- 5/105 . . . . . {the neutron source being of the pulsed type}
- 5/107 . . . . {and detecting reflected or back-scattered neutrons}
- 5/108 . . . . . {the neutron source being of the pulsed type}
- 5/12 . . . using gamma or X-ray sources {(gamma sources using isotopes [G21G 4/00](#); X-ray tubes [H01J 35/00](#))}
- 5/125 . . . . {and detecting the secondary gamma- or X-rays in different places along the bore hole}
- 5/14 . . . using a combination of several sources, e.g. a neutron and a gamma source
- 5/145 . . . . {using a neutron source combined with a gamma- or X-ray source}
- 7/00 Measuring gravitational fields or waves; Gravimetric prospecting or detecting**
- 7/005 . {using a resonating body or device, e.g. string ([G01V 7/08](#) - [G01V 7/12](#) take precedence; measuring resonant frequency of mechanical vibrations [G01H 13/00](#); measuring frequency [per se G01R 23/00](#))}
- 7/02 . Details
- 7/04 . . Electric, photoelectric, or magnetic indicating or recording means
- 7/06 . . Analysis or interpretation of gravimetric records
- 7/08 . . using balances
- 7/10 . . using torsion balances, e.g. Eötvös balance
- 7/12 . . using pendulums
- 7/14 . . using free-fall time
- 7/16 . specially adapted for use on moving platforms, e.g. ship, aircraft
- 8/00 Prospecting or detecting by optical means**
- NOTE**
- This group covers the use of {millimetre waves,} infra-red, visible or ultra-violet light.
- 8/005 . {operating with millimetre waves, e.g. measuring the black losey radiation}
- 8/02 . Prospecting
- 8/10 . Detecting, e.g. by using light barriers ([by reflection from the object G01S 17/00](#))
- 8/12 . . using one transmitter and one receiver
- 8/14 . . . using reflectors
- 8/16 . . . using optical fibres
- 8/18 . . . using mechanical scanning systems
- 8/20 . . using multiple transmitters or receivers
- 8/22 . . . using reflectors
- 8/24 . . . using optical fibres
- 8/26 . . . using mechanical scanning systems
- 9/00 Prospecting or detecting by methods not provided for in groups [G01V 1/00](#) - [G01V 8/00](#)**
- 9/002 . {using fields or radiation detectable only by persons susceptible therefor, e.g. radio-esthesis, dowsing}
- 9/005 . {by thermal methods, e.g. after generation of heat by chemical reactions}
- 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](#))}
- 9/02 . Determining existence or flow of underground water
- 11/00 Prospecting or detecting by methods combining techniques covered by two or more of main groups [G01V 1/00](#) - [G01V 9/00](#)**
- 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](#))}
- 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](#))}
- 11/007 . {using the seismo-electric effect}
- 13/00 Manufacturing, calibrating, cleaning, or repairing instruments or devices covered by groups [G01V 1/00](#) - [G01V 11/00](#)**
- 15/00 Tags attached to, or associated with, an object, in order to enable detection of the object (record carriers for use with machines having a detectable tag or marker [G06K 19/00](#))**
- 99/00 Subject matter not provided for in other groups of this subclass**
- 99/005 . {Geomodels or geomodelling, not related to particular measurements}
- 2200/00 Details of seismic or acoustic prospecting or detecting in general**
- 2200/10 . Miscellaneous details
- 2200/12 . . Clock synchronization-related issues
- 2200/14 . . Quality control
- 2200/16 . . Measure-while-drilling or logging-while-drilling
- 2210/00 Details of seismic processing or analysis**
- 2210/10 . Aspects of acoustic signal generation or detection
- 2210/12 . . Signal generation
- 2210/121 . . . Active source
- 2210/1212 . . . . Shot
- 2210/1214 . . . . Continuous
- 2210/1216 . . . . Drilling-related
- 2210/123 . . . Passive source, e.g. microseismics
- 2210/1232 . . . . Earthquakes
- 2210/1234 . . . . Hydrocarbon reservoir, e.g. spontaneous or induced fracturing

- 2210/1236 . . . . Acoustic daylight, e.g. cultural noise
- 2210/125 . . . Virtual source
- 2210/127 . . . Cooperating multiple sources
- 2210/129 . . . Source location
- 2210/1291 . . . . Air
- 2210/1293 . . . . Sea
- 2210/1295 . . . . Land surface
- 2210/1297 . . . . Sea bed
- 2210/1299 . . . . Subsurface, e.g. in borehole or below weathering layer or mud line
- 2210/14 . . Signal detection
- 2210/142 . . . Receiver location
- 2210/1421 . . . . Air
- 2210/1423 . . . . Sea
- 2210/1425 . . . . Land surface
- 2210/1427 . . . . Sea bed
- 2210/1429 . . . . Subsurface, e.g. in borehole or below weathering layer or mud line
- 2210/144 . . . with functionally associated receivers, e.g. hydrophone and geophone pairs
- 2210/16 . . Survey configurations
- 2210/161 . . . Vertical seismic profiling [VSP]
- 2210/163 . . . Cross-well
- 2210/165 . . . Wide azimuth
- 2210/167 . . . Very long offset
- 2210/169 . . . Sparse arrays
- 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](#))
- 2210/21 . . Frequency-domain filtering, e.g. band pass
- 2210/22 . . Time-domain filtering
- 2210/23 . . Wavelet filtering
- 2210/24 . . Multi-trace filtering
- 2210/242 . . . F-k filtering, e.g. ground roll
- 2210/244 . . . Radon transform
- 2210/25 . . Transform filter for merging or comparing traces from different surveys
- 2210/26 . . Modulation or demodulation, e.g. for continuous sources
- 2210/27 . . Other pre-filtering
- 2210/30 . Noise handling ([trace signal pre-filtering G01V 2210/20](#))
- 2210/32 . . Noise reduction
- 2210/322 . . . Trace stacking
- 2210/324 . . . Filtering
- 2210/3242 . . . . Flow noise
- 2210/3244 . . . . Cultural noise
- 2210/3246 . . . . Coherent noise, e.g. spatially coherent or predictable
- 2210/3248 . . . . Incoherent noise, e.g. white noise
- 2210/34 . . Noise estimation ([quality control G01V 2200/14](#))
- 2210/36 . . Noise recycling, i.e. retrieving non-seismic information from noise
- 2210/38 . . Noise characterisation or classification
- 2210/40 . Transforming data representation ([for pre-filtering purposes G01V 2210/20](#))
- 2210/41 . . Arrival times, e.g. of P or S wave or first break
- 2210/42 . . Waveform, i.e. using raw or pre-filtered trace data
- 2210/43 . . Spectral
- 2210/44 . . F-k domain
- 2210/45 . . F-x or F-xy domain
- 2210/46 . . Radon transform
- 2210/47 . . Slowness, e.g. tau-pi
- 2210/48 . . Other transforms
- 2210/50 . Corrections or adjustments related to wave propagation ([noise handling G01V 2210/30](#))
- 2210/51 . . Migration
- 2210/512 . . . Pre-stack
- 2210/514 . . . Post-stack
- 2210/52 . . Move-out correction
- 2210/522 . . . Dip move-out [DMO]
- 2210/53 . . Statics correction, e.g. weathering layer or transformation to a datum
- 2210/532 . . . Dynamic changes in statics, e.g. sea waves or tidal influences
- 2210/54 . . Borehole-related corrections
- 2210/542 . . . Casing
- 2210/544 . . . Invasion zone
- 2210/55 . . Array focusing; Phased arrays
- 2210/56 . . De-ghosting; Reverberation compensation
- 2210/57 . . Trace interpolation or extrapolation, e.g. for virtual receiver; Anti-aliasing for missing receivers
- 2210/58 . . Media-related
- 2210/582 . . . Dispersion
- 2210/584 . . . Attenuation
- 2210/586 . . . Anisotropic media
- 2210/588 . . . Non-linear media
- 2210/59 . . Other corrections
- 2210/60 . Analysis
- 2210/61 . . Analysis by combining or comparing a seismic data set with other data
- 2210/612 . . . Previously recorded data, e.g. time-lapse or 4D
- 2210/6122 . . . . Tracking reservoir changes over time, e.g. due to production
- 2210/6124 . . . . . Subsidence, i.e. upwards or downwards
- 2210/614 . . . Synthetically generated data
- 2210/616 . . . Data from specific type of measurement
- 2210/6161 . . . . Seismic or acoustic, e.g. land or sea measurements
- 2210/6163 . . . . Electromagnetic
- 2210/6165 . . . . Gravitational
- 2210/6167 . . . . Nuclear
- 2210/6169 . . . . using well-logging
- 2210/62 . . Physical property of subsurface
- 2210/622 . . . Velocity, density or impedance
- 2210/6222 . . . . Velocity; travel time
- 2210/6224 . . . . Density
- 2210/6226 . . . . Impedance
- 2210/624 . . . Reservoir parameters
- 2210/6242 . . . . Elastic parameters, e.g. Young, Lamé or Poisson
- 2210/6244 . . . . Porosity
- 2210/6246 . . . . Permeability
- 2210/6248 . . . . Pore pressure
- 2210/626 . . . with anisotropy
- 2210/63 . . Seismic attributes, e.g. amplitude, polarity, instant phase
- 2210/632 . . . Amplitude variation versus offset or angle of incidence [AVA, AVO, AVI]
- 2210/64 . . Geostructures, e.g. in 3D data cubes
- 2210/641 . . . Continuity of geobodies
- 2210/642 . . . Faults
- 2210/643 . . . Horizon tracking

## G01V

- 2210/644 . . . Connectivity, e.g. for fluid movement
- 2210/645 . . . Fluid contacts
- 2210/646 . . . Fractures
- 2210/647 . . . Gas hydrates
- 2210/65 . . Source localisation, e.g. faults, hypocenters or reservoirs
- 2210/66 . . Subsurface modeling
- 2210/661 . . . Model from sedimentation process modeling, e.g. from first principles
- 2210/663 . . . Modeling production-induced effects
- 2210/665 . . . using geostatistical modeling
- 2210/6652 . . . . Kriging
- 2210/667 . . . Determining confidence or uncertainty in parameters
- 2210/67 . . Wave propagation modeling
- 2210/671 . . . Raytracing
- 2210/673 . . . Finite-element; Finite-difference
- 2210/675 . . . Wave equation; Green's functions
- 2210/677 . . . Spectral; Pseudo-spectral
- 2210/679 . . . Reverse-time modeling or coalescence modelling, i.e. starting from receivers
- 2210/70 . . Other details related to processing
- 2210/72 . . Real-time processing
- 2210/74 . . Visualisation of seismic data