

**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](#))

**NOTES**

1. In this subclass, the geophysical methods apply both to the earth and to other celestial objects, e.g. planets.
2. 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 3/101](#),  
[G01V 3/104](#)

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

Groups [G01V 1/44](#) - [G01V 1/52](#) take precedence over groups  
[G01V 1/001](#) - [G01V 1/393](#) [G01V 1/42](#)

- [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 2001/204 . . . . {Reinforcements, e.g. by tensioning cables}
- G01V 2001/205 . . . . {Internal damping}
- G01V 2001/207 . . . . {Buoyancy}
- 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 [E21B 47/00](#))}
- 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 ( <a href="#">G01V 1/37</a> 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 ( <a href="#">G01V 1/28</a> , { <a href="#">G01V 1/42</a> take precedence})
G01V 1/3808	. . {Seismic data acquisition, e.g. survey design (in general <a href="#">G01V 1/003</a> )}
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 <a href="#">B63B</a> )}
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 ( <a href="#">G01V 1/52</a> takes precedence)
G01V 1/44	. . using generators and receivers in the same well ( <a href="#">G01V 1/52</a> 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 2001/526	. . . {Mounting of transducers}
<b>G01V 3/00</b>	<b>Electric or magnetic prospecting or detecting (by optical means <a href="#">G01V 8/00</a>); Measuring magnetic field characteristics of the earth, e.g. declination, deviation (for navigation, for surveying <a href="#">G01C</a>; {measuring direction or magnitude of magnetic fields or magnetic flux in general <a href="#">G01R 33/02</a>)}</b>
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 2003/084 . . . . {Sources}
- G01V 2003/085 . . . . {Receivers}
- G01V 2003/086 . . . . {Processing}
- 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](#) - [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](#) - [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 body 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 conveyor [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](#) - [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](#) - [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 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
<b>G01V 2210/00</b>	<b>Details of seismic processing or analysis</b>
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 ( <a href="#">removing noise G01V 2210/32</a> )
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 ( <a href="#">trace signal pre-filtering G01V 2210/20</a> )
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 ( <a href="#">quality control G01V 2200/14</a> )
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 ( <a href="#">for pre-filtering purposes G01V 2210/20</a> )
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 ( <a href="#">noise handling G01V 2210/30</a> )
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