

CPC**COOPERATIVE PATENT CLASSIFICATION****G01V**

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 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 (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 2001/526	...	{Mounting of transducers}
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 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 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 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