

SEARCH HISTORY

Application Number	PCT/US 18/48382
Search Conducted By	AEK
Search Approved By	SV

CPC/IPC Classifications Searched	IPC: A61N 1/16, C01D 3/22, H05K 9/00 (2018.01) CPC: H05K 9/0081, H05K 9/0088
Date Conducted	22 October 2018 (22.10.2018)

Documentation Searched	IPC: A61N 1/16, C01D 3/22, H05K 9/*, C08K 3/16, G21F 1/06, G21F 1/12 (2018.01) CPC: H05K 9/0081, H05K 9/0088, C08K 3/16, G21F 1/06, G21F 1/103, G21F 1/12, C02F 1/005
Search Terms Used	Himalayan sea salt halite polymer plastic rubber glass composite film layer electromagnetic radiation protect shield block attenuate
Date Conducted	22 October 2018 (22.10.2018)

Electronic Database Searched	Patbase
Files Searched	(Europe) AT BA BE BG CH CS CY CZ DD DK EE ES FI GE GR HR HU IE IS IT LT LU LV MC MD MT NL NO PL PT RO RS SE SI SK SM TR UA YU (Asia) EA GC HK ID IL IN KZ MN MY PH RU SG SU TH TJ TW UZ VN (North America) CA CR CU DO GT HN MX NI PA SV TT (South America) AR BR CL CO EC PE UY (Australasia) AU NZ (Africa) AP DZ EG KE MA MW OA ZA ZM ZW
Date Conducted	22 October 2018 (22.10.2018)

Search Logic:**Classification Search**

Search 1: IC = (A61N1/16 or C01D3/22 or H05K9/00 or G21F1/06 or G21F1/12 or C08K3/16) (Results 59142)

Search 2: CPC = (H05K9/0081 or H05K9/0088 or G21F1/06 or G21F1/12 or A61N1/16 or

- G21F1/103 or C02F1/005 or C08K3/16) (Results 5131)
- Search 3: 1 or 2 (Results 60683)
- Search 4: 3 and cl=himalayan (Results 0)
- Search 5: 3 and ft=himalaya% (Results 6)
- Search 6: 3 and cl=("rock salt" or halite or polyhalite or "sodium chloride" or "sea salt" or himalaya%) and cl=(block* or shield* or protect*) (Results 29)
- Search 7: 3 and ft=((himalaya% or rock or sea) w1 salt) and ft=(electromagnetic or wave or radiation or radio or microwave) (Results 20)
- Search 8: 7 not 6 (Results 17)
- Search 9: 3 and cl=((shield* or block* or protect* or attenuat*) near (electromagnetic or wave or radiation or radio or microwave)) (Results 4087)
- Search 10: 9 and cl=(polymer or plastic or rubber or elastomer or glass) (Results 1304)
- Search 11: 10 and cl=(salt or "sodium chloride") (Results 56)
- Search 12: 11 not (7 or 6) (Results 54)
- Search 13: 3 and ft="electromagnetic reduction" (Results 5)
- Search 14: 3 and ft(("cell phone%" or "mobile phone%" or "wireless" or "laptop" or "computer" or "antenna%" or "transmitter%" or "router") near (shield* or block* or protect* or attenuat*)) and cl=salt% (Results 13)
- Search 15: 3 and cl=(multilayer or layered or laminat* or film* or stack) and cl=salt% and cl=(polymer or plastic or resin or rubber or elastomer or photoresist) and ft=electromagn* (Results 76)
- Search 16: 15 not (14 or 7 or 6) (Results 71)
- Search 17: 15 or 14 or 13 or 11 or 7 or 6 or 5 (Results 162)

Keyword Search

- Search 18: cl=himalaya* and cl=salt* (Results 56)
- Search 19: 18 not 17 (Results 56)
- Search 20: cl=((himalaya% or rock or sea) w1 salt) and cl=(electromagnetic or wave or radiation or radio or microwave) and cl=(shield* or block* or protect* or attenuat*) (Results 34)
- Search 21: 20 not (18 or 17) (Results 29)
- Search 22: cl=(halite or polyhalite or "sodium chloride" or ((himalaya% or rock or sea) w1 salt)) and cl=(composite or blend or multilayer or polymer or glass) and ft=electromagnetic (Results 341)
- Search 23: 22 and cl=(health* or heal* or shield* or protect* or smog* or block* or "negative ion**") (Results 136)
- Search 24: 23 not (20 or 18 or 17) (Results 127)
- Search 25: ft=(ELF or "electromagnetic shielding") and ft=himalaya* (Results 20)
- Search 26: 25 not (20 or 18 or 17) (Results 15)

Forward / Backward Citation Search

- Search 27: pn = (US20160067369 or DE202006013063 or KR100917318 or JPH11224994 or US5968854 or US4896001 or US8445879 or US6001282 or US6188174 or

US5989720 or US20160067369 or US5686178 or US20020179860 or
 US5686178 or US20070243349 or US20120236528) (Results 13)

Search 28: (ctf 27 or ctb 27) not (25 or 20 or 18 or 17) (Results 382)

Electronic Database Searched	Google Patents
Files Searched	All patent offices
Date Conducted	22 October 2018 (22.10.2018)
Search Logic:	
"himalayan sea salt" - 9 results "himalayan salt" - 108 results emi shielding resin filler - 11,029 results emi shielding halite - 42 results "sodium chloride" electromagnetic shielding - 6,437 results "electromagnetic radiation" shielding salt - 10,365 results "electromagnetic radiation" "sodium chloride" - 10,501 results "electromagnetic radiation" "sodium chloride" shielding - 1,300 results himalayas salt resin - 524 results himalayas salt glass - 455 results electromagnetic shielding multilayer - 97,629 results salt multilayer electromagnetic blocking - 38,678 results multilayer EMI shield film - 7,173 results multilayer EMI shield film "sodium chloride" - 124 results himalayan composite anti EMI blocking film - 0 results	

Electronic Database Searched	Google Scholar
Files Searched	Non-patent literature
Date Conducted	22 October 2018 (22.10.2018)
Search Logic:	
health concerns electromagnetic pollution - 38,300 results	

cited: Saunders, " Health hazards and electromagnetic fields" - 43 results
 cited: Havas, " Health concerns associated with energy efficient lighting and their electromagnetic emissions" - 19 results
 cited: Ahlbom, " Electromagnetic radiation: Environmental pollution and health" - 54 results
 "himalayan salt" radiation shield - 77 results
 "himalayan salt" electromagnetic - 59 results
 "himalayan sea salt" electromagnetic - 8 results
 blocking cell phone radiation from giving you brain cancer - 22,200 results
 cited: Hardell, " Meta-analysis of long-term mobile phone use and the association with brain tumours" - 210 results
 himalayan salt WITHIN cited: Hardell - 0 results
 salt WITHIN cited: Hardell - 7 results

Supplemental

Electronic Database Searched	Google Patents
Date Conducted	23 October 2018 (23.10.2018)
Search Logic:	

"electromagnetic reduction" metal salt and glass
 About 8 results

"electromagnetic reduction" metal salt and polymer
 About 9 results