

## SEARCH HISTORY

<b>Application Number</b>	PCT/US 14/48974
<b>Search Conducted By</b>	BOK
<b>Search Approved By</b>	RLP

<b>CPC/IPC Classifications Searched</b>	IPC(8) - H04R 5/00(2014.01) CPC - H04S 1/002
<b>Date Conducted</b>	04 December 2014 (04.12.2014)

<b>Documentation Searched</b>	CPC: H04S 1/002, H04S 5/00, H04S 2420/01, H04S 1/005, H04S 3/00; USPC: 381/17, 381/1; IPC(8): H04R 5/00 (2014.01) (keyword limited; terms below)
<b>Search Terms Used</b>	audio sound ultrasound gesture touch reflect space detect monitor match pattern template control angle distance dimension hand finger motion signature encode surface correlate match displacement phase shift
<b>Date Conducted</b>	04 December 2014 (04.12.2014)

<b>Electronic Database Searched</b>	PatBase
<b>Files Searched</b>	Full-text: AU BE BR CA CH CN DE DK EP ES FI FR GB IN JP KR SE TH TW US WO Bibliographic: (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
<b>Date Conducted</b>	04 December 2014 (04.12.2014)
<b>Search Logic:</b>	

## SEARCH HISTORY

- 1) cpc=H04S1/002 (614)
- 2) 1 and (audio\* or sound\*) (602)
- 3) 2 and (ultrasonic\* or ultrasound\* or acoustic\*) (385)
- 4) 3 and (gesture\* or touch\*) (23)
- 5) 4 and reflect\* (12)
- 6) 3 and (space\* or spatial\*) (312)
- 7) 6 and (detect\* or monitor\* or match\*) (179)
- 8) 7 and (pattern\* or template\* or learn\* or train\*) (80)
- 9) 8 and control\* (69)
- 10) 9 and (angle\* or distance\* or axial\* or axis\*) (66)
- 11) 10 and (dimension\* or spatial\*) (61)
- 12) 11 and (motion\* or movement\* or track\*) (40)
- 13) 12 and (signature\* or encrypt\* or encod\*) (14)
- 14) 13 and surface\* (7)
- 15) 14 and (angle\* or angular\*) (7)
- 16) 11 and (correlat\* or match\*) (45)
- 17) 16 and (displac\* or waveform\*) (26)
- 18) 17 and (spatial\* w4 audio\*) (4)
- 19) 18 and (phase\* w3 shift\*) (3)
- 20) (cpc=(H04S1/002 or H04S5/00 or H04S2420/01 or H04S1/005 or H04S3/00) or uc=(381/17 or 381/1) or ipc=H04R5/00) (9602)
- 21) 20 and (audio\* or sound\*) (6621)
- 22) 21 and (ultrasonic\* or ultrasound\* or acoustic\*) (3017)
- 23) 22 and (gesture\* or touch\*) (299)
- 24) 23 and reflect\* (157)
- 25) 24 and (space\* or spatial\*) (136)
- 26) 25 and (hand\* or finger\* or arm\*) (115)
- 27) 26 and (detect\* or monitor\* or match\*) (106)
- 28) 27 and (pattern\* or template\* or learn\* or train\*) (71)
- 29) 28 and control\* (70)
- 30) 29 and (angle\* or distance\* or axial\* or axis\*) (65)
- 31) 30 and (dimension\* or spatial\*) (60)
- 32) 31 and (motion\* or movement\* or track\*) (58)
- 33) 32 and (signature\* or encrypt\* or encod\*) (44)
- 34) 33 and surface\* (30)
- 35) 34 and (angle\* or angular\*) (20)
- 36) 35 and (correlat\* or match\*) (18)
- 37) 36 and (displac\* or waveform\*) (11)
- 38) 37 and (spatial\* w4 audio\*) (5)
- 39) 38 and (phase\* w3 shift\*) (1)
- 40) (audio\* or sound\*) (100000)
- 41) 40 and (ultrasonic\* or ultrasound\* or acoustic\*) (100000)
- 42) 41 and (gesture\* or touch\*) (51920)
- 43) 42 and reflect\* (22047)
- 44) 43 and (space\* or spatial\*) (15935)
- 45) 44 and (detect\* or monitor\* or match\*) (15045)
- 46) 45 and (pattern\* or template\* or learn\* or train\*) (11810)
- 47) 46 and (hand\* or finger\* or arm%) (11158)
- 48) 47 and control\* (10976)
- 49) 48 and (angle\* or distance\* or axial\* or axis\*) (9708)
- 50) 49 and (dimension\* or spatial\*) (8217)

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- 51) 50 and (motion\* or movement\* or track\*) (7822)  
 52) 51 and (signature\* or encrypt\* or encod\*) (4982)  
 53) 52 and (detect\* w3 gestur\*) (413)  
 54) 53 and surface\* (381)  
 55) 54 and (angle\* or angular\*) (340)  
 56) 55 and (correlat\* or match\*) (293)  
 57) 56 and (displac\* or waveform\*) (180)  
 58) 57 and (spatial\* w4 audio\*) (8)  
 59) 58 and (phase\* w3 shift\*) (2)

<b>Electronic Database Searched</b>	Google
<b>Files Searched</b>	Google Web
<b>Date Conducted</b>	04 December 2014 (04.12.2014)
<b>Search Logic:</b>	
<p>Terms: audio ultrasound gesture detect control          About 5,290,000 results (0.58 seconds)</p> <p>Terms: audio ultrasound gesture hand control spatial audio dimension          About 166,000 results (0.59 seconds)</p> <p>Terms: audio ultrasound detect gesture control angle dimension          About 10,600,000 results (0.63 seconds)</p>	

<b>Electronic Database Searched</b>	Google
<b>Files Searched</b>	Google Scholar (Including Patents)
<b>Date Conducted</b>	04 December 2014 (04.12.2014)
<b>Search Logic:</b>	
<p>Terms: audio ultrasound gesture detect control          About 4,900 results (0.08 sec)</p> <p>Terms: audio ultrasound gesture hand control spatial audio dimension          About 6,970 results (0.15 sec)</p> <p>Terms: audio ultrasound detect gesture control angle dimension          About 7,170 results (0.15 sec)</p>	

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