

SEARCH HISTORY

Application Number	PCT/US 18/49264
Search Conducted By	RII
Search Approved By	RLP

CPC/IPC Classifications Searched	CPC: G06K 9/00288, G06K 9/00268, H04N 7/181, H04N 21/44008, G06K 9/0077 IPC(8):H04N 7/18 (2018.01)
Date Conducted	02 November 2018 (02.11.2018)

Documentation Searched	USPC: 348/161; 382/118; 382/227; 382/228
Search Terms Used	Video, picture, image, digital, file, clip, face, person, target, object, recognition, identify, resolution, pixel, second, detect, third, reduce, low, less, match, confidence, score, bounding, box
Date Conducted	02 November 2018 (02.11.2018)

Electronic Database Searched	Patbase
Files Searched	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
Date Conducted	02 November 2018 (02.11.2018)
Search Logic:	
Search 1: UC=(348/161 or 382/118 or 382/227 or 382/228) (Results 3939)	

Search 2: CPC=(G06K9/00288 or G06K9/00268 or H04N7/181 or H04N21/44008 or G06K9/0077) (Results 16796)
Search 3: IC=H04N7/18 (Results 110736)
Search 4: (1 or 2 or 3) (Results 122492)
Search 5: 4 and (video% or picture% or image% or (digital file%) or clip%) (Results 102188)
Search 6: 5 and ((face or facial% or person% or target% or object*) w4 (recogni* or ident*)) (Results 16032)
Search 7: 6 and resolution* (Results 5000)
Search 8: 7 and ((second or 2nd or detect* or recogni* or third or 3rd) w4 resolut*) (Results 874)
Search 9: 8 and ((reduc* or low or lower* or less*) w4 (pixel* or resolut*)) (Results 621)
Search 10: 9 and match* (Results 435)
Search 11: 10 and ((confidenc* or accurac*) w3 (score% or level%)) (Results 68)
Search 12: 11 and vector* (Results 47)
Search 13: 12 and (vector* w2 distanc*) (Results 5)
Search 14: 8 and (bounding w2 box*) (Results 121)
Search 15: 14 and (box w4 (pixel* or resolution*)) (Results 18)
Search 16: 12 and (featur* w3 vector*) (Results 15)
Search 17: (video% or picture% or image% or (digital file%) or clip%) (Results 1000000)
Search 18: 17 and ((face or facial% or person% or target% or object*) w4 (recogni* or ident*)) (Results 263508)
Search 19: 18 and resolution* (Results 73898)
Search 20: 19 and ((second or 2nd or detect* or recogni* or third or 3rd) w4 resolut*) (Results 8499)
Search 21: 20 and ((reduc* or low or lower* or less*) w4 (pixel* or resolut*)) (Results 4565)
Search 22: 21 and match* (Results 3212)
Search 23: 22 and ((confidenc* or accurac*) w3 (score% or level%)) (Results 448)
Search 24: 23 and vector* (Results 344)
Search 25: 24 and (vector* w2 distanc*) (Results 22)
Search 26: 25 and (bounding w2 box*) (Results 4)
Search 27: 24 and ((second or 2nd or detect* or recogni* or third or 3rd) w4 resolut*) (Results 344)
Search 28: 27 and (box w4 (pixel* or resolution*)) (Results 14)
Search 29: 28 and (featur* w3 vector*) (Results 7)
Search 30: 27 and (social* w3 (relationship* or affinit*)) (Results 4)

Search 1: ((face or facial* or person) w4 (recog* or ID or ident*)) (Results 133149)
Search 2: 1 and (boundary w2 box*) (Results 67)
Search 3: 1 and (bound* w2 box*) (Results 1654)
Search 4: 3 and (algorithm* or equation*) (Results 1385)
Search 5: 4 and ((recog* or ID or ident*) w4 (algorithm or equation)) (Results 330)
Search 6: 5 and pixel* (Results 281)
Search 7: 6 and resolution (Results 182)
Search 8: 7 and (box w2 (face or facial or person)) (Results 13)
Search 9: 7 and (detect* w2 resolut*) (Results 13)
Search 10: 7 and (pixel* w2 resolut*) (Results 20)
Search 11: 1 and (box w2 (face or facial or person)) (Results 534)
Search 12: 11 and (algorithm* or equation*) (Results 330)
Search 13: 12 and ((recog* or ID or ident*) w4 (algorithm or equation)) (Results 97)
Search 14: 13 and pixel* (Results 85)
Search 15: 14 and resolution (Results 58)
Search 16: 11 and vector* (Results 298)

Search 17: 16 and ((multiple or plural*) w4 (frame* or scene*)) (Results 31)
Search 18: 16 and (consecutiv* w3 fram*) (Results 12)

Electronic Database Searched	Google
Files Searched	Patents
Date Conducted	02 November 2018 (02.11.2018)
Search Logic:	
<p>facial recognition video segment About 51,800 results (0.31 seconds)</p> <p>facial recognition video segment resolution About 49,700 results (0.31 seconds)</p> <p>facial recognition video segment resolution matching confidence score About 8,730 results (0.49 seconds)</p> <p>facial recognition video segment resolution matching confidence score bounding box About 3,730 results (0.53 seconds)</p> <p>facial recognition video segment resolution matching confidence score bounding box color normalization About 2,370 results (0.52 seconds)</p> <p>SAO Supplemental Search: About 21,800 results (0.41 seconds) corners bounding box match OR recognize user pixel face</p> <p>About 119,000 results (0.42 seconds) feature vector face recognition segment</p> <p>About 25,900 results (0.51 seconds) feature vector face recognition segment confidence score OR value</p>	

Electronic Database Searched	Google
Files Searched	Scholar
Date Conducted	02 November 2018 (02.11.2018)
Search Logic:	

facial recognition video segment

About 69,400 results (0.09 sec)

facial recognition video segment resolution

About 43,200 results (0.15 sec)

facial recognition video segment resolution matching confidence score

About 19,800 results (0.18 sec)

facial recognition video segment resolution matching confidence score bounding box

About 13,600 results (0.18 sec)

facial recognition video segment resolution matching confidence score bounding box color normalization

About 5,000 results (0.14 sec)

Electronic Database Searched	Google
Files Searched	Web
Date Conducted	02 November 2018 (02.11.2018)
Search Logic:	
<p>facial recognition video segment About 14,400,000 results (0.43 seconds)</p> <p>facial recognition video segment resolution About 10,800,000 results (0.48 seconds)</p> <p>facial recognition video segment resolution matching confidence score About 2,830,000 results (0.60 seconds)</p> <p>facial recognition video segment resolution matching confidence score bounding box About 877,000 results (0.76 seconds)</p> <p>facial recognition video segment resolution matching confidence score bounding box color normalization About 355,000 results (0.73 seconds)</p>	