

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1
 Stylesheet Version v1.2

EPAS ID: PAT6123139

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT
CONVEYING PARTY DATA	
Name	Execution Date
PANASONIC CORPORATION	05/21/2020
RECEIVING PARTY DATA	
Name:	PANASONIC SEMICONDUCTOR SOLUTIONS CO., LTD.
Street Address:	1, KOTARI-YAKEMACHI, NAGAOKAKYO-SHI,
City:	KYOTO
State/Country:	JAPAN
Postal Code:	617-8520
PROPERTY NUMBERS Total: 1052	
Property Type	Number
Application Number:	09586992
Application Number:	09711884
Application Number:	09819646
Application Number:	09911831
Application Number:	09791729
Application Number:	09983076
Application Number:	09828936
Application Number:	09602180
Application Number:	09981981
Application Number:	09794771
Application Number:	10040788
Application Number:	09774342
Application Number:	09870467
Application Number:	09695773
Application Number:	10635534
Application Number:	11653419
Application Number:	09865492
Application Number:	09820842
Application Number:	09921912
Application Number:	09946480

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Property Type	Number
Application Number:	09880797
Application Number:	10003430
Application Number:	09986288
Application Number:	10238107
Application Number:	09942948
Application Number:	09599354
Application Number:	10043324
Application Number:	10186760
Application Number:	09899548
Application Number:	09721873
Application Number:	10021006
Application Number:	09713175
Application Number:	09709929
Application Number:	10173155
Application Number:	09791568
Application Number:	10262003
Application Number:	09984914
Application Number:	10323746
Application Number:	10218307
Application Number:	10159725
Application Number:	10098566
Application Number:	09973887
Application Number:	10038901
Application Number:	10122366
Application Number:	10011704
Application Number:	10166246
Application Number:	09584542
Application Number:	10336814
Application Number:	10057878
Application Number:	09984908
Application Number:	10215159
Application Number:	10369548
Application Number:	10002673
Application Number:	10053552
Application Number:	10139327
Application Number:	10095579
Application Number:	10101267
Application Number:	10358202

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Property Type	Number
Application Number:	10418049
Application Number:	10286814
Application Number:	10253524
Application Number:	10162211
Application Number:	10377509
Application Number:	10142599
Application Number:	10306588
Application Number:	10245012
Application Number:	10307376
Application Number:	09833061
Application Number:	10354700
Application Number:	10164409
Application Number:	10330160
Application Number:	10430050
Application Number:	10200950
Application Number:	10226375
Application Number:	10428586
Application Number:	10234250
Application Number:	10350069
Application Number:	10017389
Application Number:	10252563
Application Number:	10750862
Application Number:	10600596
Application Number:	10667455
Application Number:	10183367
Application Number:	10153699
Application Number:	10197021
Application Number:	10345973
Application Number:	10701422
Application Number:	10119951
Application Number:	10006718
Application Number:	09785502
Application Number:	10377314
Application Number:	09938528
Application Number:	10119123
Application Number:	10686597
Application Number:	10372971
Application Number:	10223316

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Property Type	Number
Application Number:	10717640
Application Number:	10484904
Application Number:	10460175
Application Number:	10365502
Application Number:	09697429
Application Number:	10208628
Application Number:	10673479
Application Number:	09968942
Application Number:	10620614
Application Number:	10902133
Application Number:	10434063
Application Number:	10282862
Application Number:	10628168
Application Number:	10959972
Application Number:	10625302
Application Number:	10376291
Application Number:	10943125
Application Number:	10690705
Application Number:	10685700
Application Number:	10947274
Application Number:	10368206
Application Number:	10860112
Application Number:	10520155
Application Number:	10935278
Application Number:	10750359
Application Number:	10821979
Application Number:	10316122
Application Number:	10805072
Application Number:	10633040
Application Number:	10881883
Application Number:	10455431
Application Number:	10699986
Application Number:	10125082
Application Number:	10243915
Application Number:	09680943
Application Number:	10715848
Application Number:	10727676
Application Number:	10960092

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Property Type	Number
Application Number:	10129809
Application Number:	11012724
Application Number:	11148381
Application Number:	11280314
Application Number:	10098895
Application Number:	11153230
Application Number:	10973254
Application Number:	10636595
Application Number:	10902120
Application Number:	10831426
Application Number:	11214343
Application Number:	11232869
Application Number:	10791805
Application Number:	11204378
Application Number:	10515433
Application Number:	11099605
Application Number:	10804807
Application Number:	10960161
Application Number:	10510216
Application Number:	10994436
Application Number:	11137414
Application Number:	11198089
Application Number:	10890154
Application Number:	10829580
Application Number:	11100244
Application Number:	10676135
Application Number:	10961118
Application Number:	10602724
Application Number:	11063533
Application Number:	10861487
Application Number:	11245336
Application Number:	11245091
Application Number:	10713213
Application Number:	09867766
Application Number:	10773315
Application Number:	11191963
Application Number:	10962573
Application Number:	11097359

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Property Type	Number
Application Number:	11396608
Application Number:	10914334
Application Number:	10931206
Application Number:	11202230
Application Number:	11070267
Application Number:	11072310
Application Number:	10970533
Application Number:	11104789
Application Number:	10945920
Application Number:	10915391
Application Number:	10922176
Application Number:	09639157
Application Number:	11101572
Application Number:	11008960
Application Number:	10990545
Application Number:	11062699
Application Number:	10819873
Application Number:	10927715
Application Number:	11242000
Application Number:	11444438
Application Number:	11074722
Application Number:	11324243
Application Number:	10619191
Application Number:	10914225
Application Number:	11038702
Application Number:	10849554
Application Number:	11085575
Application Number:	11224034
Application Number:	11175450
Application Number:	10420985
Application Number:	11261927
Application Number:	11122094
Application Number:	11258128
Application Number:	11523699
Application Number:	11180679
Application Number:	11090885
Application Number:	10825407
Application Number:	11491032

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Property Type	Number
Application Number:	10496297
Application Number:	11495778
Application Number:	10527084
Application Number:	11159155
Application Number:	11204051
Application Number:	11195835
Application Number:	11305074
Application Number:	11229771
Application Number:	10980269
Application Number:	11398771
Application Number:	11124261
Application Number:	11370038
Application Number:	10550954
Application Number:	10814347
Application Number:	11708478
Application Number:	11375814
Application Number:	10573573
Application Number:	10983661
Application Number:	11242904
Application Number:	11016713
Application Number:	11132272
Application Number:	11705448
Application Number:	11466843
Application Number:	11405060
Application Number:	11503956
Application Number:	11501818
Application Number:	11583848
Application Number:	11716704
Application Number:	11068834
Application Number:	10993812
Application Number:	11159134
Application Number:	11489616
Application Number:	11345396
Application Number:	11484756
Application Number:	11501064
Application Number:	11523564
Application Number:	10847442
Application Number:	11878971

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Property Type	Number
Application Number:	11510638
Application Number:	11000904
Application Number:	11404802
Application Number:	11534288
Application Number:	11706343
Application Number:	11501822
Application Number:	11558706
Application Number:	11642965
Application Number:	11545424
Application Number:	10952862
Application Number:	10594398
Application Number:	11258743
Application Number:	11502430
Application Number:	11539251
Application Number:	11727915
Application Number:	11783956
Application Number:	11516509
Application Number:	10793795
Application Number:	11359480
Application Number:	11216003
Application Number:	11826566
Application Number:	11484775
Application Number:	10983737
Application Number:	10569960
Application Number:	11792081
Application Number:	11722110
Application Number:	11389117
Application Number:	11175137
Application Number:	11843896
Application Number:	11783799
Application Number:	11481861
Application Number:	11790009
Application Number:	11376186
Application Number:	11978201
Application Number:	11649206
Application Number:	11139590
Application Number:	11001075
Application Number:	11805556

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Property Type	Number
Application Number:	10576423
Application Number:	11084526
Application Number:	11374093
Application Number:	10592427
Application Number:	11519221
Application Number:	11733645
Application Number:	11557788
Application Number:	11733566
Application Number:	11643696
Application Number:	10714358
Application Number:	11531381
Application Number:	11723064
Application Number:	11896816
Application Number:	11712480
Application Number:	11819784
Application Number:	11198950
Application Number:	10764513
Application Number:	11515745
Application Number:	11219716
Application Number:	12136267
Application Number:	10808615
Application Number:	11963944
Application Number:	11270615
Application Number:	11826810
Application Number:	12007298
Application Number:	12035344
Application Number:	11683121
Application Number:	11905532
Application Number:	11798367
Application Number:	10790699
Application Number:	11529271
Application Number:	11755094
Application Number:	11882173
Application Number:	10957982
Application Number:	11219774
Application Number:	11883539
Application Number:	11792777
Application Number:	11727692

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Property Type	Number
Application Number:	11889920
Application Number:	12043310
Application Number:	10696621
Application Number:	10805194
Application Number:	11092946
Application Number:	11320827
Application Number:	12030480
Application Number:	11812292
Application Number:	11354331
Application Number:	11700124
Application Number:	11607908
Application Number:	10764484
Application Number:	11127250
Application Number:	11822906
Application Number:	11846634
Application Number:	11953412
Application Number:	10712770
Application Number:	11889130
Application Number:	11484753
Application Number:	11898701
Application Number:	11222222
Application Number:	11998602
Application Number:	11958966
Application Number:	11491260
Application Number:	10957599
Application Number:	11558632
Application Number:	11698100
Application Number:	10802914
Application Number:	12149136
Application Number:	12076788
Application Number:	11902880
Application Number:	11594098
Application Number:	11648627
Application Number:	15201883
Application Number:	11547487
Application Number:	11200193
Application Number:	11453827
Application Number:	11500464

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Property Type	Number
Application Number:	11600149
Application Number:	12186573
Application Number:	11224982
Application Number:	11127116
Application Number:	11488628
Application Number:	11643704
Application Number:	11773066
Application Number:	11964943
Application Number:	12233853
Application Number:	10581038
Application Number:	11866724
Application Number:	11660517
Application Number:	12055714
Application Number:	10768623
Application Number:	11526057
Application Number:	11882974
Application Number:	11000973
Application Number:	12241896
Application Number:	11488196
Application Number:	11806300
Application Number:	12166688
Application Number:	11905646
Application Number:	12123933
Application Number:	11686892
Application Number:	11808157
Application Number:	12120462
Application Number:	11919746
Application Number:	11797405
Application Number:	12056860
Application Number:	12401904
Application Number:	11569683
Application Number:	11783643
Application Number:	10901107
Application Number:	11826562
Application Number:	11907340
Application Number:	12191011
Application Number:	11703717
Application Number:	11297406

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Property Type	Number
Application Number:	12199831
Application Number:	12369953
Application Number:	12127384
Application Number:	12118803
Application Number:	10624481
Application Number:	10584620
Application Number:	11243979
Application Number:	12216274
Application Number:	11916319
Application Number:	11739254
Application Number:	11896973
Application Number:	11792946
Application Number:	11667299
Application Number:	11712479
Application Number:	12281034
Application Number:	12209661
Application Number:	11526816
Application Number:	11889210
Application Number:	11968909
Application Number:	10739305
Application Number:	12208833
Application Number:	11665075
Application Number:	11727229
Application Number:	12268891
Application Number:	11459727
Application Number:	11633635
Application Number:	12186934
Application Number:	11918745
Application Number:	11533561
Application Number:	11933695
Application Number:	11223939
Application Number:	11414374
Application Number:	11614113
Application Number:	12167559
Application Number:	12262623
Application Number:	10574345
Application Number:	11195286
Application Number:	12092675

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Property Type	Number
Application Number:	11291781
Application Number:	11541677
Application Number:	11700121
Application Number:	11896974
Application Number:	12059789
Application Number:	12268028
Application Number:	11941365
Application Number:	12363156
Application Number:	12066000
Application Number:	10970724
Application Number:	12267878
Application Number:	11861545
Application Number:	11878836
Application Number:	12096019
Application Number:	11971334
Application Number:	11407084
Application Number:	11582441
Application Number:	11889219
Application Number:	12048895
Application Number:	12204317
Application Number:	12401929
Application Number:	11852672
Application Number:	11976672
Application Number:	12169462
Application Number:	11854197
Application Number:	12212186
Application Number:	11908000
Application Number:	12075359
Application Number:	12041817
Application Number:	11727651
Application Number:	11898443
Application Number:	12056378
Application Number:	12261393
Application Number:	12326179
Application Number:	11193337
Application Number:	12195204
Application Number:	11513023
Application Number:	11525716

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Property Type	Number
Application Number:	11917821
Application Number:	12258835
Application Number:	11712974
Application Number:	11797128
Application Number:	11822781
Application Number:	11898971
Application Number:	12021317
Application Number:	12357720
Application Number:	11400936
Application Number:	11620883
Application Number:	11716743
Application Number:	11597794
Application Number:	11662090
Application Number:	11808448
Application Number:	12375353
Application Number:	12105879
Application Number:	12269583
Application Number:	11393667
Application Number:	12201369
Application Number:	12398551
Application Number:	10800716
Application Number:	12184949
Application Number:	10564288
Application Number:	11908430
Application Number:	11651962
Application Number:	11979122
Application Number:	12105027
Application Number:	12326462
Application Number:	11213990
Application Number:	11905399
Application Number:	12197615
Application Number:	10579136
Application Number:	11568565
Application Number:	11997700
Application Number:	11699422
Application Number:	12054800
Application Number:	10599615
Application Number:	12065433

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Property Type	Number
Application Number:	12368622
Application Number:	12369283
Application Number:	12298258
Application Number:	11949919
Application Number:	12175047
Application Number:	12183887
Application Number:	11704357
Application Number:	11822780
Application Number:	12392452
Application Number:	12081889
Application Number:	11742159
Application Number:	12261544
Application Number:	12258881
Application Number:	11571112
Application Number:	11995634
Application Number:	11562126
Application Number:	11785293
Application Number:	11808957
Application Number:	11902089
Application Number:	12067953
Application Number:	12550368
Application Number:	12430469
Application Number:	11652140
Application Number:	12405656
Application Number:	11912173
Application Number:	12442649
Application Number:	12445357
Application Number:	12264539
Application Number:	10962499
Application Number:	12144122
Application Number:	12332081
Application Number:	11918040
Application Number:	12566186
Application Number:	12090349
Application Number:	11699567
Application Number:	11676747
Application Number:	11714762
Application Number:	12033538

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Property Type	Number
Application Number:	12341296
Application Number:	12159786
Application Number:	11802625
Application Number:	12402085
Application Number:	11210866
Application Number:	11483746
Application Number:	12722317
Application Number:	11646420
Application Number:	12295500
Application Number:	11662927
Application Number:	11592150
Application Number:	11885410
Application Number:	12071082
Application Number:	10953063
Application Number:	11793626
Application Number:	11996015
Application Number:	12651061
Application Number:	12014316
Application Number:	11812869
Application Number:	12120802
Application Number:	11659107
Application Number:	12172548
Application Number:	12416506
Application Number:	11783465
Application Number:	12195059
Application Number:	11995924
Application Number:	11703719
Application Number:	11826877
Application Number:	11907999
Application Number:	12445383
Application Number:	12209233
Application Number:	12425029
Application Number:	12298664
Application Number:	12446964
Application Number:	12524313
Application Number:	12332844
Application Number:	12709148
Application Number:	11905063

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Property Type	Number
Application Number:	12514025
Application Number:	11956715
Application Number:	12513914
Application Number:	12194053
Application Number:	12505799
Application Number:	12065468
Application Number:	11610007
Application Number:	11889818
Application Number:	12178324
Application Number:	12370057
Application Number:	12488867
Application Number:	11886432
Application Number:	11798325
Application Number:	12090310
Application Number:	12877540
Application Number:	12153028
Application Number:	11945464
Application Number:	12408291
Application Number:	11494705
Application Number:	12091245
Application Number:	11570658
Application Number:	11652607
Application Number:	12054968
Application Number:	12304075
Application Number:	11916474
Application Number:	11887648
Application Number:	11527681
Application Number:	12518388
Application Number:	12342707
Application Number:	11474379
Application Number:	11593650
Application Number:	11606185
Application Number:	12526910
Application Number:	12458311
Application Number:	12445380
Application Number:	12776459
Application Number:	12607697
Application Number:	11653326

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Property Type	Number
Application Number:	12376256
Application Number:	11951441
Application Number:	12516703
Application Number:	12248156
Application Number:	12847732
Application Number:	12260562
Application Number:	12510785
Application Number:	12161124
Application Number:	12491658
Application Number:	12240313
Application Number:	12536120
Application Number:	12939704
Application Number:	11621276
Application Number:	12294177
Application Number:	12669812
Application Number:	11898305
Application Number:	12094494
Application Number:	11979483
Application Number:	12019367
Application Number:	12602414
Application Number:	12139715
Application Number:	10855346
Application Number:	12791543
Application Number:	12579955
Application Number:	11206947
Application Number:	12667092
Application Number:	12208595
Application Number:	12767369
Application Number:	12190949
Application Number:	12726791
Application Number:	12427952
Application Number:	11514151
Application Number:	12280013
Application Number:	12974577
Application Number:	12489870
Application Number:	12470666
Application Number:	12137894
Application Number:	12161612

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Property Type	Number
Application Number:	12518400
Application Number:	12519476
Application Number:	12352977
Application Number:	12400376
Application Number:	12421125
Application Number:	12093076
Application Number:	12066472
Application Number:	11712904
Application Number:	11798678
Application Number:	11873436
Application Number:	12307211
Application Number:	12666722
Application Number:	12861411
Application Number:	11270604
Application Number:	11790736
Application Number:	11996888
Application Number:	12375118
Application Number:	12364111
Application Number:	11661273
Application Number:	11188855
Application Number:	12090762
Application Number:	12159232
Application Number:	11678889
Application Number:	12626056
Application Number:	12683917
Application Number:	11798326
Application Number:	12949346
Application Number:	11813370
Application Number:	11812291
Application Number:	12063637
Application Number:	12302468
Application Number:	12886056
Application Number:	12336879
Application Number:	12429768
Application Number:	12128184
Application Number:	12938108
Application Number:	10593446
Application Number:	11970796

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Property Type	Number
Application Number:	12113571
Application Number:	12212836
Application Number:	12899164
Application Number:	12485253
Application Number:	12133911
Application Number:	12207790
Application Number:	12364797
Application Number:	12539245
Application Number:	11579596
Application Number:	12694897
Application Number:	12018590
Application Number:	12135645
Application Number:	12239119
Application Number:	13069708
Application Number:	12513638
Application Number:	12529103
Application Number:	12529466
Application Number:	12676933
Application Number:	12427162
Application Number:	12715916
Application Number:	13117838
Application Number:	11907167
Application Number:	12336043
Application Number:	12089289
Application Number:	12677421
Application Number:	12539251
Application Number:	12472726
Application Number:	12330686
Application Number:	12918874
Application Number:	12711660
Application Number:	12867392
Application Number:	12706636
Application Number:	12348543
Application Number:	11333339
Application Number:	12442241
Application Number:	12600793
Application Number:	12193326
Application Number:	12571838

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Property Type	Number
Application Number:	13165551
Application Number:	13089673
Application Number:	12305299
Application Number:	12671162
Application Number:	12865193
Application Number:	12762845
Application Number:	12170160
Application Number:	12994916
Application Number:	13099770
Application Number:	12470919
Application Number:	12718490
Application Number:	12747060
Application Number:	12935387
Application Number:	12489674
Application Number:	13246483
Application Number:	13109213
Application Number:	12947613
Application Number:	13095457
Application Number:	12967624
Application Number:	12863535
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Application Number:	13310894
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Application Number:	12874719
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Application Number:	13037831
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Application Number:	12515379
Application Number:	11578521
Application Number:	12593820
Application Number:	12677404
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Application Number:	12535211
Application Number:	12990323
Application Number:	12687531
Application Number:	12994462
Application Number:	13166405
Application Number:	12857157

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Property Type	Number
Application Number:	12669174
Application Number:	12721851
Application Number:	13234326
Application Number:	12999019
Application Number:	13042906
Application Number:	12935455
Application Number:	11405449
Application Number:	12875495
Application Number:	13007033
Application Number:	13327389
Application Number:	12993706
Application Number:	12750232
Application Number:	13001905
Application Number:	13106571
Application Number:	13051415
Application Number:	11658869
Application Number:	13067721
Application Number:	13137380
Application Number:	13014360
Application Number:	13104484
Application Number:	12816686
Application Number:	12682676
Application Number:	13179331
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Application Number:	12507386
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Application Number:	13061312
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Application Number:	13373241
Application Number:	12810080
Application Number:	13070106
Application Number:	12904399
Application Number:	13209086

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Property Type	Number
Application Number:	12934018
Application Number:	12934033
Application Number:	12745190
Application Number:	13417548
Application Number:	13485203
Application Number:	12331467
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Application Number:	12640218
Application Number:	13238537
Application Number:	13596154
Application Number:	13001943
Application Number:	13128575
Application Number:	13179339
Application Number:	12508193
Application Number:	12570206
Application Number:	13529707
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Application Number:	12920154
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Application Number:	12707209
Application Number:	12677413
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Application Number:	13516875
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Application Number:	13205408
Application Number:	13126975

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Property Type	Number
Application Number:	13132058
Application Number:	13168515
Application Number:	13147321
Application Number:	13170645
Application Number:	13010355
Application Number:	13224056
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Application Number:	13394974

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Property Type	Number
Application Number:	13214007
Application Number:	13774816
Application Number:	13515761
Application Number:	12867437
Application Number:	13271835
Application Number:	13567646
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Application Number:	13071186
Application Number:	13771148

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Property Type	Number
Application Number:	13509616
Application Number:	13575313
Application Number:	12866359
Application Number:	13210951
Application Number:	13126257
Application Number:	13153014
Application Number:	13674749
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Application Number:	13428024
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Property Type	Number
Application Number:	12172571
Application Number:	13293579
Application Number:	13562119
Application Number:	13604518
Application Number:	13609315
Application Number:	13587266
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Application Number:	13777670
Application Number:	13634161

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Property Type	Number
Application Number:	13641719
Application Number:	13976172
Application Number:	14047214
Application Number:	13982398
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Application Number:	14612271
Application Number:	14149886

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Property Type	Number
Application Number:	14332394
Application Number:	14807488
Application Number:	62976709
Application Number:	62980033
Application Number:	62989469
Application Number:	16859848

CORRESPONDENCE DATA

Fax Number:

Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent using a fax number, if provided; if that is unsuccessful, it will be sent via US Mail.

Email: iprecordals@cpaglobal.com

Correspondent Name: CPA GLOBAL LIMITED

Address Line 1: LIBERATION HOUSE

Address Line 2: CASTLE STREET

Address Line 4: ST HELIER, JERSEY JE1 IBL

NAME OF SUBMITTER:	HEIDI WHITTINGHAM
SIGNATURE:	/IPR/PS/NGBPanaSemicond2020-058AG1052P/
DATE SIGNED:	05/27/2020

Total Attachments: 35

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UNITED STATES OF AMERICA

ASSIGNMENT

WHEREAS, **Panasonic Corporation** ("ASSIGNOR"), a Corporation organized under the laws of **Japan**, with a place of business at **1006, Oaza Kadoma, Kadoma-shi, Osaka 571-8501, Japan**, owns the United States Patent(s) (the "Patent(s)") listed on the attached Schedule A; and

WHEREAS, **Panasonic Semiconductor Solutions Co., Ltd.** ("ASSIGNEE"), a Limited Company organized under the laws of **Japan**, with a place of business at **1, Kotariyakemachi, Nagaokakyo-shi, Kyoto 617-8520 Japan**, desires to acquire all rights to the Patent(s);

NOW, THEREFORE, in consideration of One Dollar (\$1.00) and other valuable consideration, the receipt of which ASSIGNOR acknowledges, ASSIGNOR has sold, assigned, transferred, and set over, and does, by this Assignment, sell, assign, transfer, and set over unto ASSIGNEE, all rights to the Patent(s), including reissues and extensions, to be held and enjoyed by ASSIGNEE, its successors, assigns, and legal representatives, for ASSIGNEE's own use and benefit and for the use and benefit of its successors, assigns, and legal representatives, to the end of the term(s) for which the Patent(s) has/have been granted or may be reissued or extended, as fully and entirely as the Patent(s) would have been held and enjoyed by ASSIGNOR had this assignment and sale not been made; together with all claims for profits and damages by reason of past infringement, with the right to sue for and collect the same for the use and benefit of ASSIGNEE, its successors, assigns, and legal representatives.

This Assignment is deemed to have become effective as from: 21 MAY 2020

IN WITNESS WHEREOF, ASSIGNOR and ASSIGNEE have caused this Assignment to be executed by its duly authorized officer or representative on the date(s) indicated below.

By: **Panasonic Corporation**

Name: **Masato Murayama**

Title: **Authorized Signing Officer, Intellectual Property Center**

Date:

By: **Panasonic Semiconductor Solutions Co., Ltd.**



Name: **Kazunari Takahashi**

Title: **Authorized Signing Officer, Manager**

Date:

UNITED STATES OF AMERICA

ASSIGNMENT

WHEREAS, Panasonic Corporation ("ASSIGNOR"), a Corporation organized under the laws of Japan, with a place of business at 1006, Onza Kadoma, Kadoma-shi, Osaka 571-8501, Japan, owns the United States Patent(s) (the "Patent(s)") listed on the attached Schedule A; and

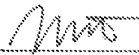
WHEREAS, Panasonic Semiconductor Solutions Co., Ltd. ("ASSIGNEE"), a Limited Company organized under the laws of Japan, with a place of business at 1, Kotari-yakemachi, Nagaokakyo-shi, Kyoto 617-8520 Japan, desires to acquire all rights to the Patent(s);

NOW, THEREFORE, in consideration of One Dollar (\$1.00) and other valuable consideration, the receipt of which ASSIGNOR acknowledges, ASSIGNOR has sold, assigned, transferred, and set over, and does, by this Assignment, sell, assign, transfer, and set over unto ASSIGNEE, all rights to the Patent(s), including reissues and extensions, to be held and enjoyed by ASSIGNEE, its successors, assigns, and legal representatives, for ASSIGNEE's own use and benefit and for the use and benefit of its successors, assigns, and legal representatives, to the end of the term(s) for which the Patent(s) has/have been granted or may be reissued or extended, as fully and entirely as the Patent(s) would have been held and enjoyed by ASSIGNOR had this assignment and sale not been made; together with all claims for profits and damages by reason of past infringement, with the right to sue for and collect the same for the use and benefit of ASSIGNEE, its successors, assigns, and legal representatives.

This Assignment is deemed to have become effective as from: May 21, 2020.

IN WITNESS WHEREOF, ASSIGNOR and ASSIGNEE have caused this Assignment to be executed by its duly authorized officer or representative on the date(s) indicated below.

By: Panasonic Corporation


Name: Masato Murayama

Title: Authorized Signing Officer, Intellectual Property Center

Date:

By: Panasonic Semiconductor Solutions Co., Ltd.

Name: Fuzunari Takahashi

Title: Manager, Management Promotion Section, Planning Department

Date:

Schedule

Country	Application Number	IP Grant Number
United States of America	9586992	8432721
United States of America	9711884	8437173
United States of America	9819646	8599602
United States of America	9911831	8618526
United States of America	9791729	8787582
United States of America	9983076	8861257
United States of America	9828936	8867259
United States of America	9602180	8927416
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United States of America	9794771	8941238
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United States of America	9774342	8942025
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United States of America	9946480	8981340
United States of America	9880797	8982233
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United States of America	9942948	8994183
United States of America	9599354	8995792
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United States of America	9899548	9001242

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United States of America	9721873	9000506
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United States of America	9713175	8999808
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United States of America	10173155	9007385
United States of America	9791568	9006701
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United States of America	9984914	9019142
United States of America	10323746	9019747
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United States of America	10358202	9082974
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Country	Application Number	IP Grant Number
United States of America	10162211	9082967
United States of America	10377509	9087581
United States of America	10142599	9087582
United States of America	10306588	9106250
United States of America	10245012	9106856
United States of America	10307376	9105332
United States of America	9833061	9111640
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Country	Application Number	IP Grant Number
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Country	Application Number	IP Grant Number
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United States of America	10676135	9595563
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United States of America	10602724	9635299
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United States of America	10713213	9658524
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United States of America	11101572	9829521
United States of America	11008960	9842645
United States of America	10990545	9854167
United States of America	11062699	9853126
United States of America	10819873	9860468

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United States of America	10927715	9871503
United States of America	11242000	9871475
United States of America	11444438	9871457
United States of America	11074722	9876977
United States of America	11324243	9876971
United States of America	10619191	9881961
United States of America	10914225	9887138
United States of America	11038702	9887003
United States of America	10849554	9893546
United States of America	11085575	9892783
United States of America	11224034	9898598
United States of America	11175450	9921312
United States of America	10420985	9921975
United States of America	11261927	9939470
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United States of America	11258128	9947146
United States of America	11523699	9948471
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United States of America	10825407	10021330
United States of America	11491032	10033286
United States of America	10496297	10033275
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United States of America	11305074	10068876
United States of America	11229771	10073164
United States of America	10980269	10085268
United States of America	11398771	10090350
United States of America	11124261	10096359

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United States of America	11370038	10116887
United States of America	10550954	10151835
United States of America	10814347	10156536
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United States of America	11375814	10193194
United States of America	10573573	10194105
United States of America	10983661	10210930
United States of America	11242904	10223811
United States of America	11016713	10256300
United States of America	11132272	10284101
United States of America	11705448	10281565
United States of America	11466843	10284091
United States of America	11405060	10281420
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United States of America	11583848	10310084
United States of America	11716704	10309916
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United States of America	10993812	10348288
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United States of America	11510638	10491842
United States of America	11000904	10488877
United States of America	11404802	10530252
United States of America	11534288	10534022
United States of America	11706343	10541230

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United States of America	11558706	10545239
United States of America	11642965	10546988
United States of America	11545424	10559051
United States of America	10952862	10564710
United States of America	10594398	10573810
United States of America	11258743	10574639
United States of America	11502430	10581124
United States of America	11539251	7459952
United States of America	11727915	7460426
United States of America	11783956	7460388
United States of America	11516509	7463665
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United States of America	11359480	7470608
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United States of America	11826566	7471579
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United States of America	11978201	7492202
United States of America	11649206	7492205
United States of America	11139590	7495296
United States of America	11001075	7499479

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United States of America	11084526	7501667
United States of America	11374093	7501617
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United States of America	11883539	7541625
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United States of America	11958966	7576612
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United States of America	12149136	7585691
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United States of America	11964943	7609194
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United States of America	11000973	7627036
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United States of America	11488196	7634744

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United States of America	11686892	7639559
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United States of America	11792946	7688059
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United States of America	11889210	7696607
United States of America	11968909	7696830
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United States of America	11941365	7741895

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United States of America	11407084	7760766
United States of America	11582441	7759696
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United States of America	11513023	7782103
United States of America	11525716	7782638
United States of America	11917821	7782707

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United States of America	11905399	7825646
United States of America	12197615	7825513
United States of America	10579136	7831044
United States of America	11568565	7830433

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United States of America	11699422	7830178
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United States of America	12065433	7834704
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United States of America	11912173	7869314
United States of America	12442649	7868662
United States of America	12445357	7868803

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United States of America	11699567	7876360
United States of America	11676747	7876857
United States of America	11714762	7877667
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United States of America	12341296	7880520
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United States of America	11662927	7894312
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United States of America	11885410	7893777
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United States of America	11812869	7903157
United States of America	12120802	7903026
United States of America	11659107	7906030

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United States of America	11996888	8031822
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United States of America	12711660	8125041
United States of America	12867392	8125817
United States of America	12706636	8130805
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United States of America	11333339	8139131
United States of America	12442241	8139453
United States of America	12600793	8148711
United States of America	12193326	8151173
United States of America	12571838	8149304
United States of America	13165551	8154909
United States of America	13089673	8154434
United States of America	12305299	8178889
United States of America	12671162	8179713
United States of America	12865193	8179714
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United States of America	13099770	8189637
United States of America	12470919	8194711
United States of America	12718490	8196023
United States of America	12747060	8198618
United States of America	12935387	8203474
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United States of America	13095457	8224105
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United States of America	12863535	8227788
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United States of America	13310894	8233311
United States of America	12710762	8232600

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United States of America	11578521	8263961
United States of America	12593820	8264577
United States of America	12677404	8264865
United States of America	12613150	8269274
United States of America	12535211	8274802
United States of America	12990323	8279657
United States of America	12687531	8278768
United States of America	12994462	8279658
United States of America	13166405	8279010
United States of America	12857157	8284283
United States of America	12669174	8295123
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United States of America	12999019	8305795
United States of America	13042906	8310581
United States of America	12935455	8309946
United States of America	11405449	8315292
United States of America	12875495	8314450
United States of America	13007033	8319875
United States of America	13327389	8319876
United States of America	12993706	8320159
United States of America	12750232	8325647
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United States of America	13106571	8324959
United States of America	13051415	8329572
United States of America	11658869	8330814
United States of America	13067721	8330188

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United States of America	13137380	8330255
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United States of America	13100939	8345506
United States of America	12745300	8345465
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United States of America	13070106	8368459
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United States of America	13209086	8373780
United States of America	12934018	8378467
United States of America	12934033	8378468
United States of America	12745190	8384061
United States of America	13417548	8384466
United States of America	13485203	8389990
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United States of America	13155786	8390559
United States of America	13001840	8391051
United States of America	12763464	8390715
United States of America	13129215	8389972
United States of America	12665182	8395688

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United States of America	12640218	8397115
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United States of America	13596154	8395930
United States of America	13001943	8395925
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United States of America	13179339	8395447
United States of America	12508193	8400544
United States of America	12570206	8401136
United States of America	13529707	8399875
United States of America	13226783	8399947
United States of America	12920154	8405076
United States of America	12982064	8405224
United States of America	13056925	8406035
United States of America	12707209	8415765
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United States of America	13132544	8426836
United States of America	13020374	8427850
United States of America	12536866	8432348
United States of America	12709699	8436399
United States of America	13516875	8437177
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United States of America	12745599	8441060
United States of America	13054312	8441837
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United States of America	13126975	8445883
United States of America	13132058	8445885
United States of America	13168515	8446792
United States of America	13147321	8445886
United States of America	13170645	8446751
United States of America	13010355	8445184

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United States of America	13193075	8455902
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United States of America	13511787	8467229
United States of America	13534315	8472238
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United States of America	12832684	8476568
United States of America	12840738	8482275
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United States of America	13321018	8482958
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United States of America	12984415	8508177
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United States of America	13218226	8514307
United States of America	13290638	8513724
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United States of America	13708501	8525555

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United States of America	13394974	8525594
United States of America	13214007	8531000
United States of America	13774816	8531869
United States of America	13515761	8530321
United States of America	12867437	8537605
United States of America	13271835	8536704
United States of America	13567646	8553446
United States of America	12743472	8553444
United States of America	13070243	8553089
United States of America	13220265	8552962
United States of America	13498541	8551853
United States of America	13563321	8559205
United States of America	12134597	8558826
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United States of America	13379450	8558622
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United States of America	13149218	8587372
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United States of America	13071186	8611456
United States of America	13771148	8618461
United States of America	13509616	8619460
United States of America	13575313	8619466
United States of America	12866359	8624214
United States of America	13210951	8624993
United States of America	13126257	8625328
United States of America	13153014	8638154
United States of America	13674749	8648472
United States of America	13758420	8648656
United States of America	13611953	8653566
United States of America	13950148	8653863
United States of America	13180128	8659690
United States of America	13274578	8666187
United States of America	13599406	8665633
United States of America	13684369	8669555
United States of America	13038821	8668553
United States of America	13448658	8669632
United States of America	13121262	8675387
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United States of America	12721054	8686704
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United States of America	13293579	8729641
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United States of America	14822253	9337172
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United States of America	14721010	9502455
United States of America	14612271	9545026
United States of America	14149886	9589877
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United States of America	14807488	10109660
United States of America	62976709	
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