

Withdrawn Pre-Grant Publication numbers, 2001 – December 1, 2017

This listing consists of Pre-Grant Publication (PGPub) numbers that have been withdrawn. No documents will be found corresponding to these withdrawn numbers.

Numbers that have been withdrawn subsequent to publication are followed by an asterisk (*).

PLEASE NOTE THAT THE WITHDRAWN PGPUB NUMBER LISTING MAY CHANGE AS INCONSISTENCIES ARE IDENTIFIED AND CORRECTED.

(source: Classification Data Systems)

Questions relating to this web page should be directed to [Mary "Cookie" Johnson](#).

| |
|------------------|
| US20010000058A1 |
| US20010000069A1 |
| US20010000070A1 |
| US20010000776A1* |
| US20010001671A1* |
| US20010002004A1* |
| US20010003113A1* |
| US20010003133A1 |
| US20010003204A1 |
| US20010004103A1 |
| US20010004691A1* |
| US20010006559A1* |
| US20010011949A1* |
| US20010013282A1* |
| US20010016957P1* |
| US20010020026A1* |
| US20010020711A1 |
| US20010021573A1 |
| US20010021584A1 |
| US20010021773A1 |
| US20010030737A1 |
| US20010031296A1* |
| US20010032179A1 |
| US20010034602A1 |
| US20010034650A1 |
| US20010034699A1 |
| US20010034785A1 |
| US20010035305A1 |
| US20010037575A1 |
| US20010037752A1 |
| US20010037879A1 |
| US20010037934A1 |

| |
|------------------|
| US20010038164A1 |
| US20010038244A1 |
| US20010038340A1 |
| US20010038366A1* |
| US20010038529A1 |
| US20010038590A1 |
| US20010038896A1 |
| US20010039028A1 |
| US20010039127A1 |
| US20010039196A1 |
| US20010039346A1 |
| US20010039688A1 |
| US20010039697A1 |
| US20010039708A1 |
| US20010039723A1 |
| US20010039793A1 |
| US20010039815A1 |
| US20010039817A1 |
| US20010039842A1 |
| US20010039899A1 |
| US20010039906A1 |
| US20010039937A1 |
| US20010039979A1 |
| US20010039987A1 |
| US20010039992A1 |
| US20010040012A1 |
| US20010040028A1 |
| US20010040059A1 |
| US20010040137A1 |
| US20010040165A1 |
| US20010040168A1 |
| US20010040209A1 |
| US20010040218A1 |
| US20010040237A1 |
| US20010040268A1 |
| US20010040304A1 |
| US20010040308A1 |
| US20010040311A1 |
| US20010040318A1 |
| US20010040319A1 |
| US20010040323A1 |
| US20010040336A1 |
| US20010040337A1 |
| US20010040363A1 |
| US20010040389A1 |

| |
|------------------|
| US20010040390A1 |
| US20010040395A1 |
| US20010040406A1 |
| US20010040407A1 |
| US20010040424A1 |
| US20010040442A1 |
| US20010040468A1 |
| US20010040491A1 |
| US20010040502A1 |
| US20010040510A1 |
| US20010040516A1 |
| US20010040563A1 |
| US20010040576A1 |
| US20010040578A1* |
| US20010040600A1 |
| US20010040601A1 |
| US20010040611A1 |
| US20010040642A1 |
| US20010040668A1 |
| US20010040673A1 |
| US20010040696A1 |
| US20010040708A1 |
| US20010040738A1 |
| US20010040767A1 |
| US20010040775A1 |
| US20010040851A1 |
| US20010040852A1 |
| US20010041010A1 |
| US20010041028A1 |
| US20010041051A1 |
| US20010041052A1 |
| US20010041059A1 |
| US20010041081A1 |
| US20010041093A1 |
| US20010041224A1 |
| US20010041243A1 |
| US20010041259A1 |
| US20010041266A1 |
| US20010041322A1 |
| US20010041371A1 |
| US20010041388A1 |
| US20010041408A1 |
| US20010041429A1 |
| US20010041430A1 |
| US20010041443A1 |

| |
|-----------------|
| US20010041445A1 |
| US20010041448A1 |
| US20010041451A1 |
| US20010041452A1 |
| US20010041454A1 |
| US20010041466A1 |
| US20010041469A1 |
| US20010041480A1 |
| US20010041499A1 |
| US20010041514A1 |
| US20010041597A1 |
| US20010041613A1 |
| US20010041653A1 |
| US20010041655A1 |
| US20010041660A1 |
| US20010041748A1 |
| US20010041836A1 |
| US20010041844A1 |
| US20010041847A1 |
| US20010041868A1 |
| US20010041889A1 |
| US20010041924A1 |
| US20010041926A1 |
| US20010041939A1 |
| US20010041951A1 |
| US20010042012A1 |
| US20010042013A1 |
| US20010042015A1 |
| US20010042044A1 |
| US20010042115A1 |
| US20010042116A1 |
| US20010042127A1 |
| US20010042129A1 |
| US20010042133A1 |
| US20010042148A1 |
| US20010042151A1 |
| US20010042154A1 |
| US20010042164A1 |
| US20010042169A1 |
| US20010042175A1 |
| US20010042191A1 |
| US20010042197A1 |
| US20010042199A1 |
| US20010042207A1 |
| US20010042208A1 |

| |
|------------------|
| US20010042211A1 |
| US20010042217A1 |
| US20010042244A1 |
| US20010043220A1* |
| US20010043221A1* |
| US20010043222A1* |
| US20010043223A1* |
| US20010043306A1 |
| US20010048385A1* |
| US20010050839A1 |
| US20010056491A1 |
| US20020002617A1 |
| US20020002966A1 |
| US20020003251A1 |
| US20020003265A1 |
| US20020003555A1 |
| US20020003663A1 |
| US20020003716A1 |
| US20020004256A1 |
| US20020004941A1 |
| US20020005143A1 |
| US20020005470A1 |
| US20020005515A1 |
| US20020005527A1 |
| US20020005604A1 |
| US20020005788A1 |
| US20020005810A1 |
| US20020005978A1 |
| US20020006200A1 |
| US20020006601A1 |
| US20020006609A1 |
| US20020006659A1 |
| US20020006738A1 |
| US20020006938A1 |
| US20020006983A1 |
| US20020007076A1 |
| US20020007077A1 |
| US20020007107A1* |
| US20020007355A1 |
| US20020007525A1 |
| US20020008570A1 |
| US20020008810A1 |
| US20020008895A1 |
| US20020009011A1 |
| US20020009189A1 |

| |
|------------------|
| US20020009470A1* |
| US20020009511A1 |
| US20020009531A1 |
| US20020009615A1 |
| US20020009702A1 |
| US20020010355A1 |
| US20020010380A1 |
| US20020010403A1 |
| US20020010951A1 |
| US20020011488A1 |
| US20020011545A1 |
| US20020012102A1 |
| US20020013040A1 |
| US20020013604A1 |
| US20020013859A1 |
| US20020014089A1 |
| US20020014319A1 |
| US20020014487A1 |
| US20020015781A1 |
| US20020016001A1 |
| US20020018581A1* |
| US20020018582A1 |
| US20020022997A1 |
| US20020023568A1 |
| US20020025234A1 |
| US20020025618A1 |
| US20020029676A1 |
| US20020031707A1 |
| US20020033983A1 |
| US20020034188A1 |
| US20020034782A1 |
| US20020035304A1 |
| US20020035711A1 |
| US20020042963A1* |
| US20020045627A1 |
| US20020046523A1 |
| US20020046553A1 |
| US20020046554A1 |
| US20020046573A1 |
| US20020046574A1 |
| US20020046615A1 |
| US20020046708A1 |
| US20020046709A1 |
| US20020047114A1 |
| US20020047160A1 |

| |
|------------------|
| US20020047162A1 |
| US20020047191A1 |
| US20020047260A1 |
| US20020047710A1 |
| US20020047785A1 |
| US20020047844A1 |
| US20020048216A1 |
| US20020048217A1 |
| US20020048227A1 |
| US20020049629A1 |
| US20020050189A1 |
| US20020050947A1 |
| US20020050949A1 |
| US20020051013A1 |
| US20020051327A1 |
| US20020051329A1 |
| US20020051686A1 |
| US20020051688A1 |
| US20020051689A1 |
| US20020051691A1 |
| US20020052273A1 |
| US20020052635A1 |
| US20020052657A1 |
| US20020052658A1 |
| US20020052924A1 |
| US20020052943A1 |
| US20020052945A1 |
| US20020052951A1 |
| US20020052953A1 |
| US20020052973A1 |
| US20020056145A1 |
| US20020063651A1* |
| US20020066274A1 |
| US20020066439A1 |
| US20020066922A1 |
| US20020067009A1 |
| US20020067090A1 |
| US20020068086A1 |
| US20020068471A1 |
| US20020068779A1 |
| US20020069485A1 |
| US20020069554A1 |
| US20020070810A1 |
| US20020072166A1 |
| US20020072486A1 |

| |
|------------------|
| US20020072633A1 |
| US20020075607A1 |
| US20020077965A9 |
| US20020081278A1 |
| US20020081281A1 |
| US20020082247A1 |
| US20020082332A1 |
| US20020083568A1 |
| US20020083569A1 |
| US20020083670A1 |
| US20020083706A1 |
| US20020084231A1 |
| US20020084609A1 |
| US20020084611A1 |
| US20020085435A1 |
| US20020086021A1 |
| US20020086740A1 |
| US20020086775A1 |
| US20020097390A1* |
| US20020100098P1 |
| US20020104488A1 |
| US20020104658A1 |
| US20020105601A1 |
| US20020106598A1 |
| US20020107136A1 |
| US20020107346A1 |
| US20020108246A1* |
| US20020108524A1* |
| US20020108936A1* |
| US20020109083A1* |
| US20020109627A1* |
| US20020109836A1* |
| US20020109852A1* |
| US20020109871A1* |
| US20020109902A1* |
| US20020109953A1* |
| US20020110160A1* |
| US20020110317A1* |
| US20020110345A1* |
| US20020110477A1* |
| US20020110813A1* |
| US20020110850A1* |
| US20020110856A1* |
| US20020110911A1* |
| US20020110937A1* |

| |
|------------------|
| US20020111750A1* |
| US20020111764A1* |
| US20020111779A1* |
| US20020112257A1* |
| US20020112486A1 |
| US20020112539A1 |
| US20020112876A1 |
| US20020112877A1 |
| US20020113071A1 |
| US20020114033A1 |
| US20020114037A1 |
| US20020114039A1 |
| US20020114041A1 |
| US20020114064A1 |
| US20020114074A1 |
| US20020114419A1 |
| US20020114561A1 |
| US20020114603A1 |
| US20020114683A1 |
| US20020114743A1 |
| US20020114785A1 |
| US20020114916A1 |
| US20020115063A1 |
| US20020115174A1 |
| US20020115192A1 |
| US20020115786A1 |
| US20020116037A1 |
| US20020119098A1 |
| US20020120479A1 |
| US20020121600A1 |
| US20020121601A1 |
| US20020123429A1 |
| US20020127964A1 |
| US20020129703A1 |
| US20020129734A1 |
| US20020132153A1 |
| US20020132418A1 |
| US20020132695A1 |
| US20020137102A1 |
| US20020142009A1* |
| US20020143005A1 |
| US20020143168A1 |
| US20020143169A1 |
| US20020178983A1* |
| US20020190889A1* |

| |
|------------------|
| US20020198163A1* |
| US20030002619A1 |
| US20030007259A1 |
| US20030018946A1 |
| US20030019416A1* |
| US20030024756A1 |
| US20030029521A1 |
| US20030029679A1 |
| US20030031288A1 |
| US20030031606A1 |
| US20030032815A1 |
| US20030045126A1 |
| US20030048215A1 |
| US20030052746A1 |
| US20030054536A1 |
| US20030064920A1 |
| US20030066983A1 |
| US20030069188A1 |
| US20030096230A1 |
| US20030099713A1 |
| US20030100008A1 |
| US20030113770A1 |
| US20030115315A1 |
| US20030124541A1 |
| US20030142779A1 |
| US20030145720A1 |
| US20030156265A1 |
| US20030162166A1 |
| US20030175284A1 |
| US20030176963A1 |
| US20030204056A1 |
| US20030211558A1 |
| US20030217796A1 |
| US20030228331A1 |
| US20030234370A1 |
| US20040001920A1 |
| US20040002909A1 |
| US20040006304A1 |
| US20040014941A1 |
| US20040020571A1 |
| US20040020572A1 |
| US20040020808A1 |
| US20040021412A1 |
| US20040022705A1 |
| US20040023308A1 |

| |
|------------------|
| US20040024491A1 |
| US20040024492A1 |
| US20040024609A1 |
| US20040024830A1 |
| US20040031804A1 |
| US20040031947A1 |
| US20040033346A1 |
| US20040040461A1 |
| US20040069116A1 |
| US20040069228A1 |
| US20040072273A1 |
| US20040072782A1 |
| US20040110240A1 |
| US20040119279A1 |
| US20040126446A1* |
| US20040130461A1 |
| US20040137157A1 |
| US20040138829A1 |
| US20040146157A1 |
| US20040150347A1 |
| US20040153248A1 |
| US20040155768A1 |
| US20040157819A1 |
| US20040158448A1 |
| US20040162770A1* |
| US20040166489A1 |
| US20040169164A1 |
| US20040171025A1 |
| US20040171140A1 |
| US20040172203A1 |
| US20040177620A1 |
| US20040188619A1 |
| US20040200379A1 |
| US20040209242A1 |
| US20040211513A1 |
| US20040211515A1 |
| US20040211581A1 |
| US20040212534A1 |
| US20040212777A1 |
| US20040214168A1 |
| US20040214491A1 |
| US20040225479A1 |
| US20040244082P1 |
| US20040245478A1 |
| US20040252022A1 |

| |
|-----------------|
| US20040257558A1 |
| US20040266097A1 |
| US20040267526A1 |
| US20050001921A1 |
| US20050002990A1 |
| US20050003775A1 |
| US20050004237A1 |
| US20050006494A1 |
| US20050009010A1 |
| US20050025703A1 |
| US20050026142A1 |
| US20050027232A1 |
| US20050032143A1 |
| US20050043255A1 |
| US20050051734A1 |
| US20050056673A1 |
| US20050060338A1 |
| US20050067842A1 |
| US20050080094A1 |
| US20050109084A1 |
| US20050111608A1 |
| US20050111993A1 |
| US20050126025A1 |
| US20050129981A1 |
| US20050133454A1 |
| US20050134259A1 |
| US20050134276A1 |
| US20050138828A1 |
| US20050139392A1 |
| US20050140370A1 |
| US20050146861A1 |
| US20050147338A1 |
| US20050151646A1 |
| US20050152496A1 |
| US20050159858A1 |
| US20050195100A1 |
| US20050206484A1 |
| US20050207513A1 |
| US20050208679A1 |
| US20050218323A1 |
| US20050218737A1 |
| US20050220390A1 |
| US20050227375A1 |
| US20050239631A1 |
| US20050239783A1 |

| |
|------------------|
| US20050242909A1 |
| US20050244562A1 |
| US20050244612A1 |
| US20050256666A1 |
| US20050263028A1 |
| US20050265519A1 |
| US20050271183A1 |
| US20050271565A1 |
| US20050274900A1 |
| US20050276663A1 |
| US20050276860A1 |
| US20050277177A1 |
| US20050279945A1 |
| US20050280439A1 |
| US20050281838A1 |
| US20050286600A1 |
| US20050287173A1 |
| US20050287379A1 |
| US20060001198A1 |
| US20060002821A1 |
| US20060008827A1 |
| US20060011058A1 |
| US20060012124A1 |
| US20060029861A1 |
| US20060040320A1 |
| US20060041177A1 |
| US20060050457A1* |
| US20060052993A1* |
| US20060058290A1 |
| US20060065074A1 |
| US20060068663A1 |
| US20060071157A1* |
| US20060073096A1 |
| US20060073285A1 |
| US20060074055A1 |
| US20060075209A1* |
| US20060081154A1 |
| US20060082008A1 |
| US20060087035A1* |
| US20060087357A1* |
| US20060087870A1* |
| US20060089930A1* |
| US20060091472A1* |
| US20060092980A1* |
| US20060094163A1* |

| |
|------------------|
| US20060095683A1* |
| US20060099761A1* |
| US20060101312A1* |
| US20060102939A1* |
| US20060102973A1* |
| US20060108626A1 |
| US20060108638A1 |
| US20060108642A1 |
| US20060108645A1 |
| US20060108649A1 |
| US20060108682A1 |
| US20060109597A1 |
| US20060110897A1 |
| US20060111856A1 |
| US20060111954A1 |
| US20060112319A1 |
| US20060113560A1 |
| US20060113607A1 |
| US20060113611A1 |
| US20060114070A1 |
| US20060114139A1 |
| US20060117128A1 |
| US20060117278A1 |
| US20060122935A1* |
| US20060134701A1 |
| US20060134702A1 |
| US20060134703A1 |
| US20060141534A1 |
| US20060143992A1 |
| US20060147472A1 |
| US20060147994A1 |
| US20060149471A1 |
| US20060152702A2 |
| US20060153521A1 |
| US20060159765A1 |
| US20060160696A1 |
| US20060162162A1 |
| US20060165279A1 |
| US20060174594A1 |
| US20060174765A1 |
| US20060174793A1 |
| US20060175378A1 |
| US20060177834A1 |
| US20060182985A1* |
| US20060187443A1 |

| |
|------------------|
| US20060188998A1 |
| US20060190289A1* |
| US20060191855A1 |
| US20060192941A1 |
| US20060197940A1 |
| US20060197941A1 |
| US20060197942A1 |
| US20060216797A1 |
| US20060238612A1 |
| US20060238709A1 |
| US20060241973A1* |
| US20060246474A1 |
| US20060247301A1 |
| US20060257020A1 |
| US20060257021A1 |
| US20060257030A1 |
| US20060260467A1 |
| US20060274884A1 |
| US20060276138A1* |
| US20060289791A1 |
| US20060293550A1 |
| US20060293848A1 |
| US20070008524A1 |
| US20070017177A1* |
| US20070017606A1 |
| US20070020106A1 |
| US20070020461A1 |
| US20070020677A1 |
| US20070020702A1 |
| US20070025819A1 |
| US20070026004A1 |
| US20070026490A1 |
| US20070031316A1 |
| US20070034137A1 |
| US20070036192A1 |
| US20070044220P1 |
| US20070044876A1* |
| US20070048207A1 |
| US20070048208A1 |
| US20070048278A1 |
| US20070048279A1 |
| US20070048280A1 |
| US20070048766A1 |
| US20070051395A1 |
| US20070051445A1* |

| |
|------------------|
| US20070052509A1 |
| US20070053488A1 |
| US20070053876A1 |
| US20070053881A1 |
| US20070054265A1 |
| US20070054367A1 |
| US20070054368A1 |
| US20070054369A1 |
| US20070054370A1 |
| US20070054371A1 |
| US20070054372A1 |
| US20070054373A1 |
| US20070056658A1 |
| US20070058484A1 |
| US20070064789A1 |
| US20070065116A1 |
| US20070065579A1 |
| US20070067884A1 |
| US20070072041A1 |
| US20070072306A1 |
| US20070073452A1 |
| US20070073788A1 |
| US20070073789A1 |
| US20070073790A1 |
| US20070073852A1 |
| US20070073881A1 |
| US20070074072A1 |
| US20070074432A1 |
| US20070074788A1 |
| US20070075111A1 |
| US20070077401A1* |
| US20070079720A1 |
| US20070079888A1 |
| US20070080192A1 |
| US20070081895A1 |
| US20070081935A1 |
| US20070083148A1 |
| US20070083974A1 |
| US20070084307A1 |
| US20070084365A1 |
| US20070084632A1 |
| US20070084910A1 |
| US20070085371A1 |
| US20070086194A1 |
| US20070087800A1 |

| |
|-----------------|
| US20070104613A1 |
| US20070111877A1 |
| US20070125096A1 |
| US20070126870A1 |
| US20070128214A1 |
| US20070138379A1 |
| US20070141861A1 |
| US20070144701A1 |
| US20070145247A1 |
| US20070150282A1 |
| US20070152166A1 |
| US20070154136A1 |
| US20070155199A1 |
| US20070155428A1 |
| US20070161911A1 |
| US20070164165A1 |
| US20070164749A1 |
| US20070166990A1 |
| US20070176112A1 |
| US20070177361A1 |
| US20070177776A1 |
| US20070183034A1 |
| US20070183261A1 |
| US20070190464A1 |
| US20070197140A1 |
| US20070200026A1 |
| US20070200068A1 |
| US20070200231A1 |
| US20070201519A1 |
| US20070202271A1 |
| US20070202412A1 |
| US20070202834A1 |
| US20070203092A1 |
| US20070203294A1 |
| US20070214212A1 |
| US20070214757A1 |
| US20070215183A1 |
| US20070215796A1 |
| US20070216565A1 |
| US20070218100A1 |
| US20070218488A1 |
| US20070219260A1 |
| US20070219743A1 |
| US20070220853A1 |
| US20070221257A1 |

| |
|-----------------|
| US20070221830A1 |
| US20070222424A1 |
| US20070222435A1 |
| US20070224592A1 |
| US20070225481A1 |
| US20070225936A1 |
| US20070235442A1 |
| US20070236241A1 |
| US20070251354A1 |
| US20070254506A1 |
| US20070258998A1 |
| US20070263414A1 |
| US20070264046A1 |
| US20070264881A1 |
| US20070266571A1 |
| US20070266802A1 |
| US20070266888A1 |
| US20070269226A1 |
| US20070272536A1 |
| US20070279641A1 |
| US20070280598A1 |
| US20070283787A1 |
| US20070284591A1 |
| US20070284800A9 |
| US20070284834A1 |
| US20070284918A1 |
| US20070286879A1 |
| US20070286991A1 |
| US20070287130A1 |
| US20070287919A1 |
| US20070287935A1 |
| US20070289020A2 |
| US20070289251A1 |
| US20070289952A1 |
| US20070292911A1 |
| US20070294331A9 |
| US20070294933A1 |
| US20080010948A1 |
| US20080014213A1 |
| US20080014773A1 |
| US20080020636A1 |
| US20080022428A1 |
| US20080022634A1 |
| US20080022863A1 |
| US20080024153A1 |

| |
|------------------|
| US20080026680A1 |
| US20080036880A1 |
| US20080039958A1 |
| US20080046177A1 |
| US20080049026A1 |
| US20080051331A1 |
| US20080052257A1 |
| US20080052260A1 |
| US20080054233A1 |
| US20080054295A1 |
| US20080054650A1 |
| US20080054666A1 |
| US20080057855A1 |
| US20080058556A1 |
| US20080058746A1 |
| US20080059101A1 |
| US20080062057A1 |
| US20080063659A1 |
| US20080064913A1* |
| US20080067037A1 |
| US20080067295A1 |
| US20080067428A1 |
| US20080067752A1 |
| US20080068738A1 |
| US20080069507A1 |
| US20080070449A1 |
| US20080070955A1 |
| US20080072379A1 |
| US20080072679A1 |
| US20080072712A1 |
| US20080074305A1 |
| US20080074620A1 |
| US20080074878A1 |
| US20080074947A1 |
| US20080075140A1 |
| US20080077864P1 |
| US20080078272A1 |
| US20080078465A1 |
| US20080078713A1 |
| US20080080138A1 |
| US20080080193A1 |
| US20080081751A1 |
| US20080081805A1 |
| US20080083165A1 |
| US20080084763A1 |

| |
|------------------|
| US20080088442A1 |
| US20080092430A1 |
| US20080092876A1* |
| US20080094622A1 |
| US20080096757A1 |
| US20080098988A1 |
| US20080099691A1 |
| US20080101397A1* |
| US20080102748A1 |
| US20080104263A1 |
| US20080109943A1 |
| US20080110278A1 |
| US20080111301A1 |
| US20080113584A1 |
| US20080118467A1 |
| US20080122095A1 |
| US20080125023A9 |
| US20080127980A1 |
| US20080128585A1 |
| US20080131364A1 |
| US20080149717A1 |
| US20080155742A1 |
| US20080157120A1 |
| US20080159621A1 |
| US20080159629A1 |
| US20080160547A1 |
| US20080160579A1 |
| US20080161383A1 |
| US20080174129A1 |
| US20080174489A1 |
| US20080176431A1 |
| US20080178291A1 |
| US20080178740A1 |
| US20080196712A1 |
| US20080202334A1 |
| US20080202342A1 |
| US20080206563A1 |
| US20080206783A1 |
| US20080206861A1 |
| US20080210051A1 |
| US20080212731A1 |
| US20080213580A1 |
| US20080214416A1 |
| US20080232587A1 |
| US20080241912A1 |

| |
|------------------|
| US20080271393A1 |
| US20080273649A1 |
| US20080280133A1 |
| US20080288426A1* |
| US20080292911A1 |
| US20080309932A1 |
| US20080314382A1 |
| US20080318175A1 |
| US20080320359A1 |
| US20090065459A1 |
| US20090067995A1 |
| US20090073431A1 |
| US20090078061A1 |
| US20090095905A1 |
| US20090097610A1 |
| US20090123729A1 |
| US20090136852A1 |
| US20090139374A1 |
| US20090140181A1 |
| US20090142575A1 |
| US20090145032A1 |
| US20090146473A1 |
| US20090149489A1 |
| US20090165904A1 |
| US20090169739A1 |
| US20090178154A1 |
| US20090192952A1* |
| US20090195238A1 |
| US20090207388A1 |
| US20090212951A1 |
| US20090212989A1 |
| US20090214867A1 |
| US20090226419A1 |
| US20090234235A1* |
| US20090237649A1 |
| US20090240018A1 |
| US20090250596A1 |
| US20090253877A1 |
| US20090308336A1 |
| US20090310838A1 |
| US20090314503A1 |
| US20100013271A1 |
| US20100068957A1 |
| US20100071538A1 |
| US20100074793A1 |

| |
|------------------|
| US20100076117A1 |
| US20100089182A1 |
| US20100098849A1 |
| US20100106032A1 |
| US20100122095A1* |
| US20100122609A1 |
| US20100124486A1 |
| US20100125083A1 |
| US20100125088A1 |
| US20100126138A1 |
| US20100143740A1 |
| US20100147144A1 |
| US20100152017A1 |
| US20100159174A1 |
| US20100160566A1 |
| US20100186614A1 |
| US20100207763A1 |
| US20100208759A1 |
| US20100215061A1 |
| US20100215949A1 |
| US20100216505A1 |
| US20100223310A1 |
| US20100228161A1 |
| US20100233163A1 |
| US20100259384A1 |
| US20100269678A1 |
| US20100271722A1 |
| US20100283455A1 |
| US20100295650A1 |
| US20100313365P1 |
| US20100313784A1 |
| US20100318305A1 |
| US20110012299A1 |
| US20110012976A1 |
| US20110015806A1 |
| US20110027320A1 |
| US20110027468A1 |
| US20110027488A1 |
| US20110027555A1 |
| US20110044420A1 |
| US20110045602A1 |
| US20110060914A1 |
| US20110107145A1 |
| US20110140963A1 |
| US20110146560A1 |

| |
|------------------|
| US20110165657A1 |
| US20110168002A1 |
| US20110182008A1 |
| US20110187094A1* |
| US20110247544A1 |
| US20110261656A1 |
| US20110266387A1 |
| US20110273146A1 |
| US20110274890A1 |
| US20110276197A1 |
| US20110282629A1 |
| US20110292393A1 |
| US20110297782A1 |
| US20120006985A1 |
| US20120024179A1 |
| US20120057315A1 |
| US20120058129A1 |
| US20120112303A1 |
| US20120137134A1 |
| US20120137919A1 |
| US20120156463A1 |
| US20120159926A1 |
| US20120173714A1 |
| US20120174851A1 |
| US20120174903A1 |
| US20120187240A1 |
| US20120194747A1 |
| US20120211289A1 |
| US20120217409A1 |
| US20120217484A1 |
| US20120217488A1 |
| US20120219104A1 |
| US20120222480A1 |
| US20120223234A1 |
| US20120292451A1 |
| US20130042847A1 |
| US20130089172A1 |
| US20130196283A1 |
| US20130222588A1 |
| US20130263690A1 |
| US20130278996A1 |
| US20130293374A1 |
| US20130295267A1 |
| US20130313319A1 |
| US20130313434A1 |

| |
|-----------------|
| US20130340066A1 |
| US20140023288A1 |
| US20140024277A1 |
| US20140067170A1 |
| US20140067261A1 |
| US20140070978A1 |
| US20140087203A1 |
| US20140088913A1 |
| US20140105881A1 |
| US20140112359A1 |
| US20140117778A1 |
| US20140120479A1 |
| US20140124886A1 |
| US20140126727A1 |
| US20140147674A1 |
| US20140160999A1 |
| US20140170375A1 |
| US20140178179A1 |
| US20140190145A1 |
| US20140192348A1 |
| US20140192831A1 |
| US20140192833A1 |
| US20140194067A1 |
| US20140197363A1 |
| US20140202159A1 |
| US20140212900A1 |
| US20140224025A1 |
| US20140238458A1 |
| US20140241935A1 |
| US20140242260A1 |
| US20140250706A1 |
| US20140255161A1 |
| US20140255684A1 |
| US20140255685A1 |
| US20140260291A1 |
| US20140260938A1 |
| US20140261417A1 |
| US20140261931A1 |
| US20140262272A1 |
| US20140264033A1 |
| US20140266852A1 |
| US20140268101A1 |
| US20140269195A1 |
| US20140271137A1 |
| US20140271350A1 |

| |
|------------------|
| US20140272139A1 |
| US20140272145A1 |
| US20140272251A1 |
| US20140272265A1 |
| US20140272281A1 |
| US20140272442A1 |
| US20140274657A1 |
| US20140283072A1 |
| US20140283082A1* |
| US20140285636A1 |
| US20140290728A1 |
| US20140290764A1 |
| US20140291934A1 |
| US20140299959A1 |
| US20140305192A1 |
| US20140305871A1 |
| US20140309780A1 |
| US20140310838A1 |
| US20140312277A1 |
| US20140314202A1 |
| US20140315387A1 |
| US20140316264A1 |
| US20140322896A1 |
| US20140326827A1 |
| US20140357182A1 |
| US20140360198A1 |
| US20140360722A1 |
| US20140361174A1 |
| US20140361918A1 |
| US20140362365A1 |
| US20140362667A1 |
| US20140363609A1 |
| US20140363688A1 |
| US20140366133A1 |
| US20140367746A1 |
| US20140370352A1 |
| US20140373932A1 |
| US20140374543A1 |
| US20150013308A1 |
| US20150031489A1 |
| US20150034828A1 |
| US20150042509A1 |
| US20150042763A1 |
| US20150046378A1* |
| US20150055749A1 |

| |
|------------------|
| US20150061760A1 |
| US20150065328A1 |
| US20150066252A1 |
| US20150069120A1 |
| US20150069881A1 |
| US20150086372A1 |
| US20150086415A1 |
| US20150089609A1* |
| US20150093234A1 |
| US20150093596A1 |
| US20150095480A1 |
| US20150095665A1 |
| US20150101521A1 |
| US20150114107A1 |
| US20150123218A1 |
| US20150131107A1 |
| US20150139254A1 |
| US20150167484A1 |
| US20150174608A1 |
| US20150184589A1 |
| US20150191630A1 |
| US20150194785A1 |
| US20150198398A1 |
| US20150204641A1 |
| US20150219518A1 |
| US20150255841A1 |
| US20150260052A1 |
| US20150283096A1 |
| US20150284594A1 |
| US20150298087A1 |
| US20150303565A1 |
| US20150314856A1 |
| US20150329201A1 |
| US20150329436A1 |
| US20150337669A1 |
| US20150353429A1 |
| US20150367939A1 |
| US20150367940A1 |
| US20150371402A1 |
| US20150372262A1 |
| US20150376753A1 |
| US20150381352A1 |
| US20160012386A1 |
| US20160035454A1 |
| US20160042646A1 |
| US20160069490A1 |
| US20160072675A1 |
| US20160076564A1 |

| |
|-----------------|
| US20160083870A1 |
| US20160097723A1 |
| US20160105197A1 |
| US20160109131A1 |
| US20160109132A1 |
| US20160111191A1 |
| US20160139260A1 |
| US20160152325A1 |
| US20160155035A1 |
| US20160157536A1 |
| US20160161848A1 |
| US20160163097A1 |
| US20160163688A1 |
| US20160164618A1 |
| US20160169101A1 |
| US20160170006A1 |
| US20160171247A1 |
| US20160171384A1 |
| US20160172659A1 |
| US20160173009A1 |
| US20160175997A1 |
| US20160181064A1 |
| US20160189703A1 |
| US20160195426A1 |
| US20160198635A1 |
| US20160198780A1 |
| US20160201750A1 |
| US20160203339A1 |
| US20160203632A1 |
| US20160205153A1 |
| US20160217296A1 |
| US20160218273A1 |
| US20160223331A1 |
| US20160241394A1 |
| US20160243052A1 |
| US20160246058A1 |
| US20160247946A1 |
| US20160248584A1 |
| US20160249225A1 |
| US20160260985A1 |
| US20160261595A1 |
| US20160277531A1 |
| US20160282561A1 |
| US20160284339A1 |
| US20160284512A1 |
| US20160292208A1 |
| US20160294588A1 |
| US20160308670A1 |

| |
|-----------------|
| US20160308671A1 |
| US20160311738A1 |
| US20160313098A1 |
| US20160322556A1 |
| US20160330037A1 |
| US20160354674A1 |
| US20160364603A1 |
| US20160373193A1 |
| US20160377732A1 |
| US20160377734A1 |
| US20160377735A1 |
| US20170005842A1 |
| US20170006936A1 |
| US20170007481A1 |
| US20170016747A1 |
| US20170018334A1 |
| US20170018847A1 |
| US20170032777A1 |
| US20170032861A1 |
| US20170081365A1 |
| US20170085325A1 |
| US20170089670A1 |
| US20170092688A1 |
| US20170093025A1 |
| US20170116803A1 |
| US20170119233A1 |
| US20170120737A1 |
| US20170122032A1 |
| US20170123051A1 |
| US20170125382A1 |
| US20170125969A1 |
| US20170126466A1 |
| US20170133369A1 |
| US20170133574A1 |
| US20170149196A1 |
| US20170149200A1 |
| US20170149201A1 |
| US20170149204A1 |
| US20170152026A1 |
| US20170152028A1 |
| US20170152029A1 |
| US20170152030A1 |
| US20170152031A1 |
| US20170152032A1 |
| US20170152036A1 |
| US20170152037A1 |
| US20170152038A1 |

| |
|-----------------|
| US20170152039A1 |
| US20170152040A1 |
| US20170152041A1 |
| US20170152101A1 |
| US20170156514A1 |
| US20170159354A1 |
| US20170160614A1 |
| US20170162244A1 |
| US20170162571A1 |
| US20170168960A1 |
| US20170168961A1 |
| US20170172683A1 |
| US20170199278A1 |
| US20170203765A9 |
| US20170204631A1 |
| US20170208173A1 |
| US20170219692A1 |
| US20170222392A1 |
| US20170240272A1 |
| US20170244155A1 |
| US20170261374A1 |
| US20170263287A1 |
| US20170265151A1 |
| US20170273117A1 |
| US20170286923A1 |