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ASSIGN....102598885   )VER SHEET
-PATENTS ONL..

11-16-03

To: Honorable Commissioner of Patents and Trademarks:

Please record the attached original document(s) or copy thereof.

1.   Name of conveying party(ies)
       a)   Cirrus Logic, Inc.

2.   Name and address of receiving party(ies):
       a)   Name: NVIDIA International, Inc.
               Address: c/o PricewaterhouseCoopers (Corporate Services Ltd)
                             The Financial Services Center
                             Attention Claudia Clarke
                             Erin Court
                             Bishop's Court Hill
                             St. Michael
                             Barbados, WI

3.   Nature of conveyance
       ☒ Assignment   ☐ Merger
       ☐ Security Agreement   ☐ Change of Name
       ☐ Other _____   ☐ License Agreement

       Execution Date: August 13, 2003

4.   Application Number(s) or Patent Number(s):

       SYSTEM FOR RASTER IMAGING WITH AUTOMATIC CENTERING AND IMAGE COMPRESSION
       US Patent 5,422,996
       Issue Date 06/06/1995

       SYSTEM FOR RASTER IMAGING WITH AUTOMATIC CENTERING AND IMAGE COMPRESSION
       US Patent 5,293,474
       Issue Date 03/08/1994

       ADDRESSING TECHNIQUE FOR TRANSPARENTLY EXTENDING DATA PROCESSING SYSTEM
       ADDRESS SPACE
       US Patent 5,032,981
       Issue Date 07/16/1991

       METHOD AND APPARATUS FOR PRODUCING PERCEPTION OF HIGH QUALITY GRAYSCALE
       SHADING ON DIGITALLY COMMANDED DISPLAYS
       US Patent 5,185,602
       Issue Date 02/09/1993

       SYSTEM FOR RUNNING INCOMPATIBLE GRAPHICS PROGRAMS
       US Patent 5,412,800
       Issue Date 05/02/1995

11/12/2003 DBYRNE   00000084 5422996

01 FC:8021   APPARATUS FOR QUANTIZING PIXEL INFORMATION TO AN OUTPUT VIDEO DISPLAY
                    SPACE
                    US Patent 5,402,506
                    Issue Date 03/28/1995

Page -1- of -9-   (Revised 01/96)

PATENT
REEL: 014646 FRAME: 0167

SHADE GRADATION ENHANCEMENT AND FLICKER REDUCTION ON DISPLAYS PROVIDING
MORE THAN TWO NATIVE SHADES
US Patent 5,313,224
Issue Date 05/17/1994

DITHERING PROCESS FOR PRODUCING SHADED IMAGES ON DISPLAY SCREENS
US Patent 5,748,163
Issue Date 05/05/1998

VIDEO PROCESSING APPARATUS, SYSTEMS AND METHODS
US Patent 5,577,203
Issue Date 11/19/1996

VIDEO PROCESSING APPARATUS, SYSTEMS AND METHODS
US Patent 5,581,280
Issue Date 12/03/1996

MANAGING AUDIO DATA USING A GRAPHICS DISPLAY CONTROLLER
US Patent 5,553,220
Issue Date 09/03/1996

IMAGE ROTATION FOR VIDEO DISPLAYS
US Patent 6,208,325
Issue Date 03/27/2001

FLEXIBLE GRAPHICS INTERFACE FOR MULTIPLE DISPLAY MODES
US Patent 5,436,641
Issue Date 07/25/1995

METHOD AND APPARATUS FOR AUTOMATICALLY MAINTAINING A
PREDETERMINEDIMAGE QUALITY IN A DISPLAY SYSTEM
US Patent 6,075,513
Issue Date 06/13/2000

PCMCIA VIDEO CARD
US Patent 5,642,139
Issue Date 06/24/1997

PCMCIA VIDEO CARD
US Patent 6,023,266
Issue Date 02/08/2000

METHOD A ND A PPARTUS F OR C ORRECTING E RRORS I N P IXEL CHARACTERISTICS WHEN
INTERPOLATING POLYGONS INTO A PIXEL GRID
US Patent 5,625,768
Issue Date 04/29/1997

GRAPHICS ACCELERATOR WITH DUAL MEMORY CONTROLLERS
US Patent 5,664,162
Issue Date 09/02/1997

INTERPOLATION RENDERING OF POLYGONS INTO A PIXEL GRID
US Patent 5,684,941
Issue Date 11/04/1997

MEMORY BANDWIDTH OPTIMIZATION

US Patent 5,611,041
Issue Date 03/11/1997

SYSTEM AND METHOD FOR DISPLAYING CLOSED CAPTION DATA ON A PC MONITOR
US Patent 5,543,850
Issue Date 08/06/1996

APPARATUS, SYSTEMS AND METHODS FOR CONTROLLING GRAPHICS AND VIDEO DATA IN MULTIMEDIA DATA PROCESSING AND DISPLAY SYSTEMS
US Patent 5,598,525
Issue Date 01/28/1997

METHOD AND APPARATUS FOR AUTOMATICALLY MAINTAINING A PREDETERMINED IMAGE QUALITY IN A DISPLAY SYSTEM
US Patent 6,121,949
Issue Date 09/19/2000

PCMCIA VIDEO CONTROLLER WITH DIRECT VIDEO PORT AND SEPARATE AUDIO CONNECTION
US Patent 5,630,174
Issue Date 05/13/1997

METHOD AND APPARATUS FOR ADAPTIVE DITHERING
US Patent 5,712,657
Issue Date 01/27/1998

METHOD AND APPARATUS FOR MONITORING A ROW ADDRESS STROBE SIGNAL IN A GRAPHICS CONTROLLER
US Patent 5,680,591
Issue Date 10/21/1997

PROGRAMMABLE CORE-VOLTAGE SOLUTION FOR A VIDEO CONTROLLER
US Patent 6,078,319
Issue Date 06/20/2000

ANIMATED TEXTURE MAP
US Patent 5,630,043
Issue Date 05/13/1997

TECHNIQUE AND APPARATUS FOR COLOR EXPANSION INTO A NON-ALIGNED 24 BIT RGB COLOR-SPACE FORMAT
US Patent 5,699,498
Issue Date 12/16/1997

POLARITY SYNCHRONIZATION METHOD AND APPARATUS FOR VIDEO SIGNALS IN A COMPUTER SYSTEM
US Patent 5,859,635
Issue Date 01/12/1999

METHOD AND APPARATUS FOR READING AHEAD DISPLAY DATA INTO A CRT FIFO OF A GRAPHICS CONTROLLER
US Patent 5,657,055
Issue Date 08/12/1997

64 BIT WIDE VIDEO FONT CACHE
US Patent 5,742,298
Issue Date 04/21/1998

(Revised 01/96)

TRANSACTION QUEUE IN A GRAPHICS CONTROLLER CHIP
US Patent 5,748,920
Issue Date 05/05/1998

METHOD AND APPARATUS FOR DETERMINING REPRESENTATIVE CHROMINANCE COMPONENTS
US Patent 5,929,837
Issue Date 07/27/1999

INTEGRATED GRAPHICS PROCESSOR HAVING A BLOCK TRANSFER ENGINE FOR AUTOMATIC GRAPHIC OPERATIONS IN A GRAPHICS SYSTEM
US Patent 6,097,401
Issue Date 08/01/2000

A METHOD AND APPARATUS FOR MINIMIZING EFFECTS OF SLOPE OVERLOAD CONDITION WHEN USING DIFFERENTIAL PULSE CODE MODULATION SCHEME
US Patent 5,850,207
Issue Date 12/15/1998

TILE MEMORY ADDRESSING WITH PROGRAMMABLE TILE DIMENSIONS
US Patent 5,815,168
Issue Date 09/29/1998

METHOD AND APPARATUS FOR OBJECT IDENTIFICATION AND COLLISON DETECTION IN THREE DIMENSIONAL GRAPHICS SPACE
US Patent 5,812,138
Issue Date 09/22/1998

METHOD AND APPARATUS FOR PREFETCHING A NEXT INSTRUCTION USING DISPLAY LIST PROCESSING IN A GRAPHICS PROCESSOR
US Patent 5,917,505
Issue Date 06/29/1999

SOFTWARE TELETEXT DECODER ARCHITECTURE
US Patent 5,835,153
Issue Date 11/10/1998

VIDEO PORT INTERFACE SUPPORTING MULTIPLE DATA FORMATS
US Patent 5,850,266
Issue Date 12/15/1998

DYNAMIC ARBITRATION PRIORITY
US Patent 5,740,383
Issue Date 04/14/1998

METHOD AND APPARATUS FOR OPTIMIZING PIXEL DATA WRITE OPERATIONS TO A TILE-BASED FRAME BUFFER
US Patent 5,754,191
Issue Date 05/19/1998

PRIORITY METHODS FOR TEXTURE MAP STORAGE
US Patent 6,121,974
Issue Date 09/19/2000

PRIORITY METHODS FOR TEXTURE MAP STORAGE
US Patent 6,326,975

(Revised 01/96)

Issue Date 12/04/2001

OBJECT REFERENCED MEMORY SEGMENTATION
US Patent 5,798,763
Issue Date 08/25/1998

A METHOD AND APPARATUS FOR EXECUTING A RASTER OPERATION IN A GRAPHICS CONTROLLER CIRCUIT
US Patent 5,959,637
Issue Date 09/28/1999

EMBEDDING A TRANSPARENCY ENABLE BIT AS PART OF A RESIZING BIT BLOCK RANSFER OPERATION
US Patent 5,909,219
Issue Date 06/01/1999

SYSTEM AND METHOD OF RENDERING POLYGONS INTO A PIXEL GRID
US Patent 5,936,635
Issue Date 08/10/1999

REQUESTING DEVICE CAPABLE OF CANCELING ITS MEMORY ACCESS REQUESTS UPON DETECTING OTHER SPECIFIC REQUESTING DEVICES SIMULTANEOUSLY ASSERTING ACCESS REQUESTS
US Patent 5,748,968
Issue Date 05/05/1998

METHOD AND APPARATUS FOR DYNAMIC XY TILED TEXTURE CACHING
US Patent 5,828,382
Issue Date 10/27/1998

METHOD AND APPARATUS FOR DYNAMIC XY TILED TEXTURE CACHING
US Patent 6,204,863
Issue Date 03/20/2001

METHOD AND APPARATUS FOR PROVIDING LCD PANEL PROTECTION IN AN LCD DISPLAY CONTROLLER
US Patent 6,310,599
Issue Date 10/30/2001

A METHOD OF OBTAINING A BUFFER OF CONTIGUOUS MEMORY AND BUILDING A PAGE TABLE
US Patent 5,987,582
Issue Date 11/16/1999

TEXTURE MAP STORAGE WITH UV REMAPPING
US Patent 5,929,869
Issue Date 07/27/1999

DYNAMIC SWITCHING OF TEXTURE MIP-MAPS BASED ON PIXEL DEPTH
US Patent 5,973,701
Issue Date 10/26/1999

ENHANCED TEXTURE MAP DATA FETCHING CIRCUIT AND METHOD
US Patent 5,831,640
Issue Date 11/03/1998

(Revised 01/96)

PATENT
REEL: 014646 FRAME: 0171

METHOD AND APPARATUS FOR OPTIMING POWER CONSUMPUTION AND MEMORY
BANDWIDTH IN A VIDEO CONTROLLER USING SGRAM AND SDRAM POWER REDUCTION
MODES
US Patent 5,881,016
Issue Date 03/09/1999

MEMORY MANAGER FOR MULTI-MEDIA APPARATUS AND METHOD THEREFOR
US Patent 6,266,753
Issue Date 07/24/2001

METHOD FOR COMPUTING PARAMETERS USED IN A NON-HOMOGENOUS SECOND ORDER
PERSPECTIVE TEXTURE MAPPING PROCESS USING INTERPOLATION
US Patent 5,841,442
Issue Date 11/24/1998

CIRCUIT FOR DETERMINING NON-HOMOGENOUS SECOND ORDER PERSPECTIVE TEXTURE
MAPPING COORDINATES USING LINEAR INTERPOLATION
US Patent 6,052,127
Issue Date 04/18/2000

NON-HOMOGENOUS 2ND ORDER PERSPECTIVE TEXTURE MAPPING USING LINEAR
INTERPOLATION PARAMETERS
US Patent 5,835,097
Issue Date 11/10/1998

DYNAMICALLY SELECTABLE TEXTURE FILTER FOR COMPUTER GRAPHICS
US Patent 6,130,674
Issue Date 10/10/2000

METHOD AND APPARATUS FOR INTERNALLY CACHING THE MINIMUM AND MAXIMUM XY
PIXEL ADDRESS VALUES IN A GRAPHICS SUBSYSTEM
US Patent 5,940,090
Issue Date 08/17/1999

METHOD AND SYSTEM FOR FILTERING TEXTURE MAP DATA FOR IMPROVED IMAGE
QUALITY IN A GRAPHICS COMPUTER SYSTEM
US Patent 6,184,893
Issue Date 02/06/2001

ARBITRATION FOR SHARED GRAPHICS PROCESSING RESOURCES
US Patent 6,002,409
Issue Date 12/14/1999

METHOD AND APPARATUS FOR AUTOMATICALLY CONTROLLING THE DESTINATION OF A
GRAPHICS COMMAND IN A REGISTER FILE
US Patent 5,999,200
Issue Date 12/07/1999

HOST DMA THROUGH SUBSYSTEM XY PROCESSING
US Patent 6,088,046
Issue Date 07/11/2000

A METHOD AND SYSTEM FOR EFFICIENT REGISTER SORTING FOR THREE
DIMENSIONAL GRAPHICS
US Patent 5,949,421
Issue Date 09/07/1999

(Revised 01/96)

SPECULAR TEXTURE MAPS IN A GRAPHICS PROCESSOR
US Patent 6,259,455
Issue Date 07/10/2001

IDENTIFYING AND LOADING CHIP SPECIFIC PORT MANAGER DRIVERS ON PLUG AND PLAY
OPERATING SYSTEMS WHILE MAINTAINING BACKWARD COMPATIBILITY
US Patent 6,032,201
Issue Date 02/29/2000

MIP MAP BLENDING IN A GRAPHICS PROCESSOR
US Patent 6,157,386
Issue Date 12/05/2000

AUTO LEVEL OF DETAIL-BASED MIP MAPPING IN A GRAPHICS PROCESSOR
US Patent 5,986,663
Issue Date 11/16/1999

TRACKING OF GRAPHICS POLYGON DATA FROM DIFFERENT CLOCK DOMAINS IN A
GRAPHICS PROCESSOR
US Patent 6,061,073
Issue Date 05/09/2000

PIXEL DATA X STRIPING IN A GRAPHICS PROCESSOR
US Patent 6,031,550
Issue Date 02/29/2000

NON-SEQUENTIAL FETCH AND STORE OF XY PIXEL DATA IN A GRAPHICS PROCESSOR
US Patent 5,999,199
Issue Date 12/07/1999

CRT TO FPD CONVERSION/PROTECTION APPARATUS AND METHOD
US Patent 6,115,032
Issue Date 09/05/2000

CRT TO FPD CONVERSION/PROTECTION APPARATUS AND METHOD
US Patent 6,219,040
Issue Date 04/17/2001

DYNAMICALLY SELECTABLE MIP MAP BLENDING FOR A SOFTWARE GRAPHICS ENGINE
US Patent 6,292,191
Issue Date 09/18/2001

CHROMA KEYED SPECULAR TEXTURE MAPPING IN A GRAPHICS PROCESSOR
US Patent 6,054,993
Issue Date 04/25/2000

SELECTABLE MODE SMOOTHING TEXTURE FILTER FOR COMPUTER GRAPHICS
US Patent 6,181,347
Issue Date 01/30/2001

ERROR CORRECTION IN A GRAPHICS PROCESSOR
US Patent 6,252,606
Issue Date 06/26/2001

APPARATUS AND METHOD FOR PRODUCING SHADED IMAGES ON DISPLAY SCREENS
US Patent 5,751,265
Issue Date 05/12/1998

(Revised 01/96)

APPARATUS, SYSTEMS AND METHODS FOR PROVIDING MULTIPLE VIDEO DATA STREAMS
FROM A SINGLE SOURCE
US Patent 5,455,626
Issue Date 10/03/1995

APPARATUS, SYSTEMS AND METHODS FOR PROVIDING MULTIPLE VIDEO DATA STREAMS
FROM A SINGLE SOURCE
US Patent 5,543,842
Issue Date 08/06/1996

APPARATUS, SYSTEMS AND METHODS FOR PROVIDING MULTIPLE VIDEO DATA STREAMS
FROM A SINGLE SOURCE
US Patent 5,539,464
Issue Date 07/23/1996

APPARATUS, SYSTEMS AND METHODS FOR PROVIDING MULTIPLE VIDEO DATA STREAMS
FROM A SINGLE SOURCE
US Patent 5,539,465
Issue Date 07/23/1996

METHOD AND APPARATUS FOR EXPANDING AND CENTERING VGA TEXT AND GRAPHICS
US Patent 5,682,170
Issue Date 10/28/1997

METHOD AND APPARATUS FOR DYNAMICALLY ADJUSTING THE NUMBER OF STAGES OF A
MULTIPLE STAGE PIPELINE
US Patent 5,778,250
Issue Date 07/07/1998

SDRAM DIMM PRESENCE DETECT INTERFACE
US Patent 5,862,320
Issue Date 01/19/1999

TILED LINEAR HOST TEXTURE STORAGE
US Patent 5,844,576
Issue Date 12/01/1998

SYSTEM AND METHOD OF SYNCHRONIZING MULTIPLE BUFFERS FOR DISPLAY
US Patent 5,969,728
Issue Date 10/19/1999

DUAL DISPLAY VIDEO CONTROLLER
US Patent 6,215,459
Issue Date 04/10/2001

METHOD AND APPARATUS FOR ASYNCHRONOUS DISPLAY OF GRAPHIC IMAGES
US Patent 6,542,150
Issue Date 04/01/2003

METHOD AND APPARATUS FOR GENERATING HARDWARE ICONS AND CURSORS
US Patent 5,668,571
Issue Date 09/16/1997

METHOD AND APPARATUS FOR ASYNCHRONOUS DISPLAY OF GRAPHIC IMAGES
US Application 10/359,734
Filing Date 02/07/03

(Revised 01/96)

PATENT
REEL: 014646 FRAME: 0174

5.   Please send all correspondence concerning this (these) documents to:

> Silicon Valley IP Group, PC
> P.O. Box 721120
> San Jose, CA 95172-1120
> Tel. No.: (408) 971-2573

6.   Total number of applications and patents involved: 97

7.   Total fee (37 CFR 3.41): <u>$3,880.00</u>

     ☒   Enclosed
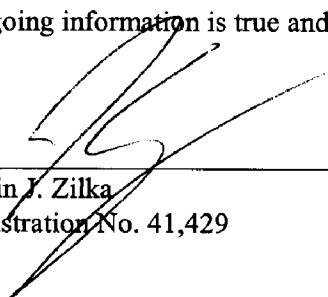   ☐   Authorized to be charged to Deposit Account No. 50-1351
          (Order No._____)

8.   To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document.

Date: _____11/05/03_____   _____
                                        Kevin J. Zilka
                                        Registration No. 41,429

          (Revised 01/96)

ASSIGNMENT OF PATENTS AND PATENT APPLICATIONS

Cirrus Logic, Inc., a Delaware corporation ("ASSIGNOR") has been assigned or otherwise has an ownership interest in certain new and useful improvements as set forth in the patents and patent applications entitled:

Patents

Patent No.	Title
5,422,996	SYSTEM FOR RASTER IMAGING WITH AUTOMATIC CENTERING AND IMAGE COMPRESSION
5,293,474	SYSTEM FOR RASTER IMAGING WITH AUTOMATIC CENTERING AND IMAGE COMPRESSION
5,032,981	ADDRESSING TECHNIQUE FOR TRANSPARENTLY EXTENDING DATA PROCESSING SYSTEM ADDRESS SPACE
5,185,602	METHOD AND APPARATUS FOR PRODUCING PERCEPTION OF HIGH QUALITY GRAYSCALE SHADING ON DIGITALLY COMMANDED DISPLAYS
5,412,800	SYSTEM FOR RUNNING INCOMPATIBLE GRAPHICS PROGRAMS
5,402,506	APPARATUS FOR QUANTIZING PIXEL INFORMATION TO AN OUTPUT VIDEO DISPLAY SPACE
5,313,224	SHADE GRADATION ENHANCEMENT AND FLICKER REDUCTION ON DISPLAYS PROVIDING MORE THAN TWO NATIVE SHADES
5,748,163	DITHERING PROCESS FOR PRODUCING SHADED IMAGES ON DISPLAY SCREENS
5,577,203	VIDEO PROCESSING APPARATUS, SYSTEMS AND METHODS
5,581,280	VIDEO PROCESSING APPARATUS, SYSTEMS AND METHODS
5,553,220	MANAGING AUDIO DATA USING A GRAPHICS DISPLAY CONTROLLER
6,208,325	IMAGE ROTATION FOR VIDEO DISPLAYS
5,436,641	FLEXIBLE GRAPHICS INTERFACE FOR MULTIPLE DISPLAY MODES
6,075,513	METHOD AND APPARATUS FOR AUTOMATICALLY MAINTAINING A PREDETERMINEDIMAGE QUALITY IN A DISPLAY SYSTEM
5,642,139	PCMCIA VIDEO CARD
6,023,266	PCMCIA VIDEO CARD

1

5,625,768	METHOD AND APPARTUS FOR CORRECTING ERRORS IN PIXEL CHARACTERISTICS WHEN INTERPOLATING POLYGONS INTO A PIXEL GRID
5,664,162	GRAPHICS ACCELERATOR WITH DUAL MEMORY CONTROLLERS
5,684,941	INTERPOLATION RENDERING OF POLYGONS INTO A PIXEL GRID
5,611,041	MEMORY BANDWIDTH OPTIMIZATION
5,543,850	SYSTEM AND METHOD FOR DISPLAYING CLOSED CAPTION DATA ON A PC MONITOR
5,598,525	APPARATUS, SYSTEMS AND METHODS FOR CONTROLLING GRAPHICS AND VIDEO DATA IN MULTIMEDIA DATA PROCESSING AND DISPLAY SYSTEMS
6,121,949	METHOD AND APPARATUS FOR AUTOMATICALLY MAINTAINING A PREDETERMINED IMAGE QUALITY IN A DISPLAY SYSTEM
5,630,174	PCMCIA VIDEO CONTROLLER WITH DIRECT VIDEO PORT AND SEPARATE AUDIO CONNECTION
5,712,657	METHOD AND APPARATUS FOR ADAPTIVE DITHERING
5,680,591	METHOD AND APPARATUS FOR MONITORING A ROW ADDRESS STROBE SIGNAL IN A GRAPHICS CONTROLLER
6,078,319	PROGRAMMABLE CORE-VOLTAGE SOLUTION FOR A VIDEO CONTROLLER
5,630,043	ANIMATED TEXTURE MAP
5,699,498	TECHNIQUE AND APPARATUS FOR COLOR EXPANSION INTO A NON-ALIGNED 24 BIT RGB COLOR-SPACE FORMAT
5,859,635	POLARITY SYNCHRONIZATION METHOD AND APPARATUS FOR VIDEO SIGNALS IN A COMPUTER SYSTEM
5,657,055	METHOD AND APPARATUS FOR READING AHEAD DISPLAY DATA INTO A CRT FIFO OF A GRAPHICS CONTROLLER
5,742,298	64 BIT WIDE VIDEO FONT CACHE
5,748,920	TRANSACTION QUEUE IN A GRAPHICS CONTROLLER CHIP
5,929,837	METHOD AND APPARATUS FOR DETERMINING REPRESENTATIVE CHROMINANCE COMPONENTS
6,097,401	INTEGRATED GRAPHICS PROCESSOR HAVING A BLOCK TRANSFER ENGINE FOR AUTOMATIC GRAPHIC OPERATIONS IN A GRAPHICS SYSTEM
5,850,207	A METHOD AND APPARATUS FOR MINIMIZING EFFECTS OF SLOPE OVERLOAD CONDITION WHEN USING DIFFERENTIAL PULSE CODE MODULATION SCHEME
5,815,168	TILE MEMORY ADDRESSING WITH PROGRAMMABLE TILE DIMENSIONS
5,812,138	METHOD AND APPARATUS FOR OBJECT IDENTIFICATION AND COLLISON DETECTION IN THREE DIMENSIONAL GRAPHICS SPACE

5,917,505	METHOD AND APPARATUS FOR PREFETCHING A NEXT INSTRUCTION USING DISPLAY LIST PROCESSING IN A GRAPHICS PROCESSOR
5,855,153	SOFTWARE TELETEXT DECODER ARCHITECTURE
5,850,266	VIDEO PORT INTERFACE SUPPORTING MULTIPLE DATA FORMATS
5,740,383	DYNAMIC ARBITRATION PRIORITY
5,754,191	METHOD AND APPARATUS FOR OPTIMIZING PIXEL DATA WRITE OPERATIONS TO A TILE-BASED FRAME BUFFER
6,121,974	PRIORITY METHODS FOR TEXTURE MAP STORAGE
6,326,975	PRIORITY METHODS FOR TEXTURE MAP STORAGE
5,798,763	OBJECT REFERENCED MEMORY SEGMENTATION
5,959,637	A METHOD AND APPARATUS FOR EXECUTING A RASTER OPERATION IN A GRAPHICS CONTROLLER CIRCUIT
5,909,219	EMBEDDING A TRANSPARENCY ENABLE BIT AS PART OF A RESIZING BIT BLOCK RANSFER OPERATION
5,936,635	SYSTEM AND METHOD OF RENDERING POLYGONS INTO A PIXEL GRID
5,748,968	REQUESTING DEVICE CAPABLE OF CANCELING ITS MEMORY ACCESS REQUESTS UPON DETECTING OTHER SPECIFIC REQUESTING DEVICES SIMULTANEOUSLY ASSERTING ACCESS REQUESTS
5,828,382	METHOD AND APPARATUS FOR DYNAMIC XY TILED TEXTURE CACHING
6,204,863	METHOD AND APPARATUS FOR DYNAMIC XY TILED TEXTURE CACHING
6,310,599	METHOD AND APPARATUS FOR PROVIDING LCD PANEL PROTECTION IN AN LCD DISPLAY CONTROLLER
5,987,582	A METHOD OF OBTAINING A BUFFER OF CONTIGUOUS MEMORY AND BUILDING A PAGE TABLE
5,929,869	TEXTURE MAP STORAGE WITH UV REMAPPING
5,973,701	DYNAMIC SWITCHING OF TEXTURE MIP-MAPS BASED ON PIXEL DEPTH
5,831,640	ENHANCED TEXTURE MAP DATA FETCHING CIRCUIT AND METHOD
5,881,016	METHOD AND APPARATUS FOR OPTIMING POWER CONSUMPTION AND MEMORY BANDWIDTH IN A VIDEO CONTROLLER USING SGRAM AND SDRAM POWER REDUCTION MODES
6,266,753	MEMORY MANAGER FOR MULTI-MEDIA APPARATUS AND METHOD THEREFOR
5,841,442	METHOD FOR COMPUTING PARAMETERS USED IN A NON-HOMOGENOUS SECOND ORDER PERSPECTIVE TEXTURE MAPPING PROCESS USING INTERPOLATION

3

6,052,127	CIRCUIT FOR DETERMINING NON-HOMOGENOUS SECOND ORDER PERSPECTIVE TEXTURE MAPPING COORDINATES USING LINEAR INTERPOLATION
5,835,097	NON-HOMOGENOUS 2ND ORDER PERSPECTIVE TEXTURE MAPPING USING LINEAR INTERPOLATION PARAMETERS
6,130,674	DYNAMICALLY SELECTABLE TEXTURE FILTER FOR COMPUTER GRAPHICS
5,940,090	METHOD AND APPARATUS FOR INTERNALLY CACHING THE MINIMUM AND MAXIMUM XY PIXEL ADDRESS VALUES IN A GRAPHICS SUBSYSTEM
6,184,893	METHOD AND SYSTEM FOR FILTERING TEXTURE MAP DATA FOR IMPROVED IMAGE QUALITY IN A GRAPHICS COMPUTER SYSTEM
6,002,409	ARBITRATION FOR SHARED GRAPHICS PROCESSING RESOURCES
5,999,200	METHOD AND APPARATUS FOR AUTOMATICALLY CONTROLLING THE DESTINATION OF A GRAPHICS COMMAND IN A REGISTER FILE
6,088,046	HOST DMA THROUGH SUBSYSTEM XY PROCESSING
5,949,421	A METHOD AND SYSTEM FOR EFFICIENT REGISTER SORTING FOR THREE DIMENSIONAL GRAPHICS
6,259,455	SPECULAR TEXTURE MAPS IN A GRAPHICS PROCESSOR
6,032,201	IDENTIFYING AND LOADING CHIP SPECIFIC PORT MANAGER DRIVERS ON PLUG AND PLAY OPERATING SYSTEMS WHILE MAINTAINING BACKWARD COMPATIBILITY
6,157,386	MIP MAP BLENDING IN A GRAPHICS PROCESSOR
5,986,663	AUTO LEVEL OF DETAIL-BASED MIP MAPPING IN A GRAPHICS PROCESSOR
6,061,073	TRACKING OF GRAPHICS POLYGON DATA FROM DIFFERENT CLOCK DOMAINS IN A GRAPHICS PROCESSOR
6,031,550	PIXEL DATA X STRIPING IN A GRAPHICS PROCESSOR
5,999,199	NON-SEQUENTIAL FETCH AND STORE OF XY PIXEL DATA IN A GRAPHICS PROCESSOR
6,115,032	CRT TO FPD CONVERSION/PROTECTION APPARATUS AND METHOD
6,219,040	CRT TO FPD CONVERSION/PROTECTION APPARATUS AND METHOD
6,292,191	DYNAMICALLY SELECTABLE MIP MAP BLENDING FOR A SOFTWARE GRAPHICS ENGINE
6,054,993	CHROMA KEYED SPECULAR TEXTURE MAPPING IN A GRAPHICS PROCESSOR
6,181,347	SELECTABLE MODE SMOOTHING TEXTURE FILTER FOR COMPUTER GRAPHICS
6,252,606	ERROR CORRECTION IN A GRAPHICS PROCESSOR
5,751,265	APPARATUS AND METHOD FOR PRODUCING SHADED IMAGES ON DISPLAY SCREENS

4

5,455,626	APPARATUS, SYSTEMS AND METHODS FOR PROVIDING MULTIPLE VIDEO DATA STREAMS FROM A SINGLE SOURCE
5,543,842	APPARATUS, SYSTEMS AND METHODS FOR PROVIDING MULTIPLE VIDEO DATA STREAMS FROM A SINGLE SOURCE
5,539,464	APPARATUS, SYSTEMS AND METHODS FOR PROVIDING MULTIPLE VIDEO DATA STREAMS FROM A SINGLE SOURCE
5,539,465	APPARATUS, SYSTEMS AND METHODS FOR PROVIDING MULTIPLE VIDEO DATA STREAMS FROM A SINGLE SOURCE
5,682,170	METHOD AND APPARATUS FOR EXPANDING AND CENTERING VGA TEXT AND GRAPHICS
5,778,250	METHOD AND APPARATUS FOR DYNAMICALLY ADJUSTING THE NUMBER OF STAGES OF A MULTIPLE STAGE PIPELINE
5,862,320	SDRAM DIMM PRESENCE DETECT INTERFACE
5,844,576	TILED LINEAR HOST TEXTURE STORAGE
5,969,728	SYSTEM AND METHOD OF SYNCHRONIZING MULTIPLE BUFFERS FOR DISPLAY
6,215,459	DUAL DISPLAY VIDEO CONTROLLER
6,542,150	METHOD AND APPARATUS FOR ASYNCHRONOUS DISPLAY OF GRAPHIC IMAGES
5,668,571	METHOD AND APPARATUS FOR GENERATING HARDWARE ICONS AND CURSORS

Patent Applications

Serial No.	Title	Filing Date
10/359,734	METHOD AND APPARATUS FOR ASYNCHRONOUS DISPLAY OF GRAPHIC IMAGES	
09/067,321	METHOD AND SYSTEM FOR PERFORMING ENHANCED LIGHTING FUNCTIONS FOR TEXTURE MAP DATA	April 27, 1998

For good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, ASSIGNOR hereby:

1)   Sells, assigns and transfer to NVIDIA International, Inc., a Cayman Island company, (hereinafter referred to as "ASSIGNEE") the entire right, title and interest in the patents and patent applications (including foreign patents) listed herein.

2)   Authorizes and requests the Commissioner of Patents to issue any and all Letters Patents resulting from said patent application(s), or any division(s), continuations(s), continuation(s)-in-part, re-examination(s) or reissues(s) of said patent applications, thereof to the ASSIGNEE.

3)   Agrees to execute all papers and documents and, entirely at the ASSIGNEE's expense, perform any acts which are reasonably necessary in connection with the prosecution of said patents and patent application(s), as well as any derivative applications, thereof, foreign

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applications based thereon, and/or the enforcement of patents resulting from such patent applications.

4) Agrees that the terms, covenants and conditions of this assignment shall inure to the benefit of the ASSIGNEE, its successors, assigns and other legal representative(s), and shall be binding upon the inventor(s), as well as the inventor's heirs, legal representatives and assigns.

5) Warrants and represents that ASSIGNOR has not entered, and will not enter into any assignment, contract, or understanding that conflicts with this assignment.

Signed on the date(s) indicated beside my (our) signatures(s).

Cirrus Logic, Inc.

By: _____ Date: 8/13/03

Printed
Name: Gregory S. Thomas

Title: Vice President, Associate General Counsel

On this 13th day of August, in the year 2003, before me Cindy Buzan
_____, personally appeared Gregory S. Thomas _____, personally known to me (or proved to be on the basis of satisfactory evidence) to be the person whose name is subscribed to the within instrument, and acknowledged to me that he/she executed the same in his/her authorized capacity, and that by his/her signature on the instrument the person, or the entity upon behalf of which the person acted, executed the instrument.
WITNESS my hand and official seal.

Signature _____
(SEAL)

CINDY T. BUZAN
NOTARY PUBLIC STATE OF TEXAS
COMMISSION EXPIRES:
MARCH 7, 2006

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PATENT
REEL: 014646 FRAME: 0181