

02-09-1999



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- ☐ Merger ☐ Other
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- ☐ Departmental File ☐ Secret File

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☐ Mark if additional names of conveying parties attached

Name (line 1) ALLIANT TECHSYSTEMS, INC. (DE Corp.)

Execution Date
Month Day Year
03/10/1995

Name (line 2) 600 SECOND STREET NE, HOPKINS, MN 55343

Second Party

Name (line 1)

Execution Date
Month Day Year

Name (line 2)

Receiving Party

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Name (line 1) MAC ACQUISITION I, INC. (CO Corp.)

☐ If document to be recorded is an assignment and the receiving party is not domiciled in the United States, an appointment of a domestic representative is attached. (Designation must be a separate document from Assignment.)

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80112

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REEL: 9737 FRAME: 0629

Correspondent Name and Address

Area Code and Telephone Number

212-756-2000

Name JOSHUA R. BRESSLER

Address (line 1) SCHULTE ROTH & ZABEL LLP

Address (line 2) 900 THIRD AVENUE

Address (line 3) NEW YORK, NEW YORK 10022

Address (line 4)

Pages

Enter the total number of pages of the attached conveyance document including any attachments.

17

Application Number(s) or Patent Number(s)

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Enter either the Patent Application Number or the Patent Number (DO NOT ENTER BOTH numbers for the same property).

Patent Application Number(s)

Patent Number(s)

SEE

ATTACHED

SCHEDULE

SEE

ATTACHED

SCHEDULE

If this document is being filed together with a new Patent Application, enter the date the patent application was

Month Day Year

Patent Cooperation Treaty (PCT)

Enter PCT application number only if a U.S. Application Number has not been assigned.

PCT

PCT

PCT

PCT

PCT

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Number of Properties

Enter the total number of properties involved.

13

Fee Amount

Fee Amount for Properties Listed (37 CFR 3.41): \$ 520.00

Method of Payment:
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Enclosed ☐

Deposit Account ☒

(Enter for payment by deposit account or if additional fees can be charged to the

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500675

Authorization to charge additional fees:

Yes



No



Statement and Signature

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. Charges to deposit account are authorized, as indicated herein.

JOSHUA R. BRESSLER

Name of Person Signing

Signature

FEBRUARY 1, 1999

Date

ALLIANT TECHSYSTEMS, INC./MAC ACQUISITION I, INC.
RECORDATION FORM COVER SHEET SCHEDULE

U.S. Patents

5,426,453
5,250,878
5,239,243
5,204,691
5,184,154
5,165,073
5,084,656
5,077,680
5,077,502
4,359,745
4,357,637
4,343,010
D 321,182

ASSIGNMENT

WHEREAS, Alliant Techsystems Inc. of Hopkins, Minnesota, a Delaware corporation, (hereinafter called "ALLIANT"), having a place of business at 600 Second Street N.E., Hopkins, Minnesota 55343-8384 is the owner of the entire right, title and interest in and to all of the patents and patent applications identified in Appendix A hereto;

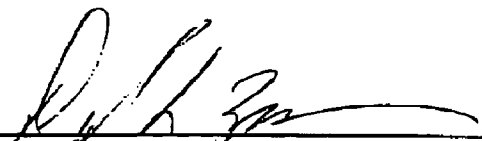
WHEREAS, Mac Acquisition I, a Colorado corporation, (herein called "MAC") having a place of business at 4800 East Dry Creek Road, Littleton, Colorado 80122, desires to acquire all right, title, and interest of ALLIANT in and to all of such patents and patent applications identified in Appendix A hereto;

WHEREAS, ALLIANT and MAC have entered into a Purchase and Sale Agreement dated as of December 31, 1992, and ALLIANT, pursuant to the provisions of Section 2.2A(a), of said agreement, have agreed to assign to MAC all of its rights in the patents and patent applications in Appendix A hereto;

NOW, THEREFORE, ALLIANT, pursuant to the provisions of aforesaid Purchase and Sale Agreement dated December 31, 1992, and subject to the terms and conditions thereof, hereby assigns its right, title and interest in the patents and patent applications listed in Appendix A hereto;

IN WITNESS WHEREOF, ALLIANT has caused this instrument to be duly executed to be effective as of the 10th day of March, 1995.

ALLIANT TECHSYSTEMS INC.

by 
Daryl L. Zimmer, Vice President and
General Counsel

State of Minnesota)
) SS
County of Hennepin)

On this 10th day of March, 1995, before me personally appeared Daryl L. Zimmer, to me known to be the person described in and who executed the foregoing instrument and acknowledged that he executed this instrument as his free act and deed.


Notary Public

babvassiga



APPENDIX A

CASE NO.	CTRY.	APPL. NO. FILING DATE	TITLE INVENTORS
901 12487	ca	2041402-2 4/29/91	facsimile apparatus for producing variable size and resolution images on a reproduction medium rothe, r. shaklee, k. l.
901 12695	ca	2041019-1 4/23/91	compensation for drift in a cathode ray tube shaklee, k. l. sturm, t. a. wittenberger, j. c
901 12768	ca	2058647-2 11/29/90	split swipe tape recording ballinger, d. o. soo, d.

METRUM INFORMATION STORAGE
ISSUED PATENTS

2/27/95

CASE NO.	CTRY.	PATENT NO. ISSUE DATE	TITLE INVENTORS
901 04290	ca	1187937 5/28/85	automatic calibration system for signal amplifier circuits spurr, r.n.

PATENT
REEL: 9737 FRAME: 0636

*900'S PAID FOR BY ATK, 901'S PAID FOR BY METRUM.

METRUM INFORMATION STORAGE
PENDING APPLICATIONS

2/27/95

CASE NO.	CTRY.	APPLN. NO. FILING DATE	TITLE INVENTORS
901 12487	ep	91107141-3 5/02/91	facsimile apparatus for producing variable size and resolution images on a reproduction medium rothe, r. shaklee, k. l.
901 12695	ep	91106589.4 4/24/91	compensation for drift in a cathode ray tube shaklee, k. l. sturm, t. a. wittenberger, j. c
901 12768	ep	91903013.0 11/29/90	split swipe tape recording ballinger, d. o. soo, d.

CASE NO.	CTRY.	APPL. NO. FILING DATE	TITLE INVENTORS
901 10584	JP	195707/1985 9/04/85	magnetostriptive record head ballinger,d.o. chynoweth,w.r. wade,g.j.
901 12487	JP	130310/1991 5/07/91	facsimile apparatus for producing variable size and resolution images on a reproduction medium rothe,r. shaklee,k.l.
901 12695	JP	123123/1991 4/26/91	compensation for drift in a cathode ray tube shaklee,k.l. sturm,t.a. wittenberger,j.c
901 12768	JP	503216/1991 11/29/90	split swipe tape recording ballinger,d.o. soo,d.
901 13693	JP	4-34641/1992 2/21/92	apparatus & method for use in appending data to data previously written on a tape in a helical scan tape recorder system bradshaw,a.d. davis,b.m. hall,h.p.

METRUM INFORMATION STORAGE
PENDING APPLICATIONS

2/27/95

CASE NO.	CTRY.	APPL. NO. FILING DATE	TITLE INVENTORS
901 20143	us	08/304417 9/12/94	media spacing system for fiber optic cathode ray tube printer anhorn, t. o'brien, d.c.

2/27/95

METRUM INFORMATION STORAGE
PENDING APPLICATIONS

CASE NO.	CTRY.	APPL. NO. FILING DATE	TITLE INVENTORS
901 12768	WP	90/06959 11/29/90	split swipe tape recording ballfinger, d.o. soo, d.

A-901'S PAID FOR BY METRUM

CASE NO.	CTRY.	PATENT NO. ISSUE DATE	TITLE INVENTORS
900 03682	ca	1056507 6/12/79	apparatus for producing continuous graphic displays from intermittently sampled data lowe,p.r.
900 03903	ca	1029466 4/11/78	magnetic recorder and printed circuit recording head therefor ballinger,d.o.
900 03916	ca	1035035 7/18/78	magnetic field producing apparatus ballinger,d.o.
900 03975	ca	1067950 12/11/79	multi-color recording medium responsive to force fields and apparatus for recording on the medium stauffer,n.l.
900 04009	ca	1032191 5/30/78	capstan and motor assembly ballinger,d.o.
900 04037	ca	1080329 6/24/80	slack tape loader beiter,g.a. evert,d.a.
900 04041	ca	1089919 11/18/80	electrographic recording head diddens,p.a. peterson,d.m.
900 04052	ca	1083246 8/05/80	trace locator for a multi-trace recorder diddens,p.a.
900 04070	ca	1084105 8/19/80	method & apparatus for making hard copy records of curves including curves which are mathematically described as ... quarton,w.t.
900 04073	ca	1115331 12/29/81	electrographic recording head having an integral recording electrode cleaning means peterson,d.m.
900 04095	ca	1073098 3/04/80	magnetic head bias amplifier braithberg,m.f.
900 04175	ca	1122306 4/20/82	control circuit bagley,j.s. van norden,g.j.
900 04182	ca	1143600 3/29/83	method of an apparatus for heat processing photo sensitive material simpson,g.r.
901 04079	ca	1106970 8/11/81	vector crt display lowe,p.r. quarton,w.t.
901 04096	ca	1088484 10/28/80	dual reel hub evert,d.a. nies,c.w.

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CASE NO.	CTRY.	PATENT NO. ISSUE DATE	TITLE INVENTORS
901 04079	fr	77 02535 8/26/83	vector crt display lowe,p.r. quarton,w.t.

CASE NO.	CTRY.	PATENT NO. ISSUE DATE	TITLE INVENTORS
900 03682	gb	1501547 6/14/78	apparatus for producing continuous graphic displays from intermittently sampled data lowe,p.r. tyler,t.n.
901 04079	gb	1516061 10/18/78	vector crt display lowe,p.r. quarton,w.t.
901 04290	gb	2124395 2/26/86	automatic calibration system for signal amplifier circuits spurr,r.n.

METRUM INFORMATION STORAGE
ISSUED PATENTS

2/27/95

CASE NO.	CTRY.	PATENT NO. ISSUE DATE	TITLE INVENTORS
900 04040	us	4157553 6/05/79	recording electrode power limiting circuit for an electrographic recorder diddens, p.a.
900 04052	us	4083040 4/04/78	trace locator for a multi-trace recorder diddens, p.a.
900 04070	us	4074281 2/14/78	method & apparatus for making hard copy records of curves including curves which are mathematically described as ... quarton, w.t.
900 04081	us	4082449 4/04/78	latensifying apparatus curtis, h.h. lapchak, m.
900 04083	us	4135208 1/16/79	cathode ray tube recording apparatus shafer, d.e.
900 04084	us	4096487 6/20/78	recording apparatus shafer, d.e.
900 04085	us	4195204 3/25/80	signal mixer circuit troutman, g.l.
900 04092	us	4118179 10/03/78	material processor with relative movement between material and its positioner ballinger, d.o.
900 04095	us	4081845 3/28/78	magnetic head bias amplifier bratberg, m.f.
900 04109	us	4091392 5/23/78	skew correction shafer, d.e.
900 04111	us	4139856 2/13/79	electrostatic recorder having a fixed head made up of a laminated stack of recording styl diddens, p.a. peterson, d.m.
900 04112	us	4095235 6/13/78	recording apparatus lowe, p.r. quarton, w.t.
900 04132	us	4165512 8/21/79	recording apparatus peterson, d.m.
900 04135	us	4177469 12/04/79	recorder with electrically conductive paper peterson, d.m.
900 04137	us	4093149 6/05/78	cartridge tape recorder system and cartridge therefor dekar, f. nordrehaug, j. shroff, b.k.

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METRUM INFORMATION STORAGE
ISSUED PATENTS

CASE NO.	CTRY.	PATENT NO. ISSUE DATE	TITLE INVENTORS
900 04138	us	4095758 6/20/78	tape recorder system shroff, b. k.
900 04139	us	4094478 6/13/78	dual motor tape recorder system shroff, b. k. shu, s. k.
900 04151	us	4172259 10/23/79	graphic recording apparatus compensated for record medium velocity changes lowe, p. r.
900 04152	us	4145697 3/20/79	graphic recording apparatus with stylus addressing by shift registers ballinger, d. o.
900 04154	us	4158205 6/12/79	record spool holder jenkins, i. e.
900 04157	us	4193078 3/11/80	electrical contact for conductive-backed paper exposito, r. h.
900 04175	us	4193100 3/11/80	control circuit bagley, j. s. van norden, g. j.
900 04178	us	4225558 9/30/80	fluid sample test apparatus and fluid sample cell for use therein peterson, d. a. skovrinsky, j. r.
900 04179	us	4213136 7/15/80	electrical contact for conductive-backed paper jenkins, i. e. lowe, p. r.
900 04195	us	4242708 12/30/80	tape recording apparatus using capacitive detectors as tape position sensors drefling, j. a.
900 04205	us	4264127 4/27/82	medical culture bottle peterson, d. m.
900 04209	us	4267276 5/12/81	medical specimen culture bottle crawford, a. b. wade, g. j.
900 04221	us	4250266 2/10/81	automatic micro-organism culture growth and detection instrument wade, g. j.
900 04243	us	4359745 11/16/82	cathode ray tube display apparatus reid, d. f.
900 04248	us	4390887 6/28/83	electrographic recording stylus chynoweth, w. r. erfickson, r. d.

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METRUM INFORMATION STORAGE
ISSUED PATENTS

2/27/95

CASE NO.	CTRY.	PATENT NO. ISSUE DATE	TITLE INVENTORS
900 04249	us	4394671 7/19/83	electrographic recording erickson, r.d.
900 04250	us	4364071 12/14/82	electrographic recording shafer, d.e.
900 04251	us	4350166 9/21/82	apnea detector moharry, j.w.
900 04260	us	4347995 9/07/82	bi-directional tape reel brake mahnen, w.j.
900 04265	us	4343010 8/03/82	recorder control circuit for suppressing incipient arcing at the heating electrodes denny, r.w.
900 04282	us	4357637 11/02/82	preamplifier circuit gilbert, t.b.
900 04288	us	4438442 3/20/84	electrographic recording apparatus with delayed paper drive termination erickson, r.d.
900 09735	us	4454520 6/12/84	electrographic recorder with enhanced writing speed braschler, b.d.
900 20091	us	5250878 10/05/93	crt beam intensity correction system rothe, r.r.
901 04094	us	4159489 6/26/79	record reproducing system bratberg, m.f.
901 04096	us	4116401 9/26/78	dual reel hub evert, d.a.
901 04133	us	4165174 8/21/79	recording apparatus jenkins, l.e.
901 04219	us	4333115 6/01/82	tape transport control system junio, d.l.
901 04255	us	4371901 2/01/83	programmable signal equalizer shah, p.l.
901 04258	us	4382268 5/03/83	tape transport speed control frimet, s.h.

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CASE NO.	CTRY.	PATENT NO. ISSUE DATE	TITLE INVENTORS
901 04280	us	4408243 10/04/83	tape cleaner bonner, c.e. sanford, h.f.
901 04281	us	4409628 10/11/83	tape transport speed control using a playback data derived clock signal frimet, s.h. meeks, l.a.
901 04283	us	4378899 4/05/83	tape drive capstan sanford, h.f.
901 04290	us	4450411 5/22/84	automatic calibration system for signal amplifier circuits spurr, r.n.
901 10584	us	4504659 8/05/86	magnetostriuctive record head ballinger, d.o. chynoweth, w.r. wade, g.j.
901 12487	us	5165073 11/17/92	facsimile apparatus for producing variable size and resolution images on a reproduction medium rothe, r. shaklee, k.l.
901 12695	us	5077502 12/31/91	compensation for drift in a cathode ray tube shaklee, k.l. sturm, t.a. wittenberger, j.c
901 12709	us	5184154 2/02/93	method and apparatus for image production by selective or random exposure element activation shaklee, k.l.
901 12768	us	5047873 9/10/91	split swipe tape recording ballinger, d.o. soo, d.
901 13107	us	4321182 10/29/91	web media dispenser losasso, j.t. sanford, h.f.
901 13693	us	5272572 12/21/93	apparatus & method for use in appending data to data previously written on a tape in a helical scan tape recorder system bradshaw, a.d. davis, b.m. hall, h.p.
901 13826	us	5204691 4/20/93	cathode ray tube mounting apparatus sanford, h.f.
901 13904	us	5077680 12/31/91	apparatus and method for printer speed control martin, j.l. shaklee, k.l. sturm, t.a.
901 13929	us	5084656 1/28/92	crt beam deflection control system martin, j.l. sturm, t.a.
901 20015	us	5289330 2/22/94	helical read/write head having a cross-cut groove wade, g.-j.

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METRUM INFORMATION STORAGE
ISSUED PATENTS

2/27/95

CASE NO.	CTRY.	PATENT NO. ISSUE DATE	TITLE INVENTORS
901 20065	us	5239243 8/24/93	crt beam deflection system rothe,r.r. sturm,t.d.

RECORDED: 02/02/1999

PATENT
REEL: 9737 FRAME: 0648

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