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(Rev. 10/02)

OMB No. 0651-0027 (exp. 6/30/2005)

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04-19-2004



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U.S. DEPARTMENT OF COMMERCE
U.S. Patent and Trademark Office

To the Honorable Commissioner of Patents and Trademarks: Please return the attached original documents or copy thereof.

1. Name of conveying party(ies):

AMF Bowling Products, Inc.
(formerly known as AMF Bowling, Inc.)Additional name(s) of conveying party(ies) attached? ☐ Yes ☒ No

3. Nature of conveyance:

- ☐ Assignment ☐ Merger
☐ Security Agreement ☐ Change of Name
☒ Other Security Interest

Execution Date: 02/27/2004

2. Name and address of receiving party(ies)

Name: Credit Suisse First Boston, CaymanInternal Address: Islands BranchStreet Address: Eleven Madison AvenueCity: New York State: NY Zip: 10010Additional name(s) & address(es) attached? ☐ Yes ☒ No

4. Application number(s) or patent number(s):

If this document is being filed together with a new application, the execution date of the application is: _____

A. Patent Application No.(s) See attached
Exhibit AB. Patent No.(s) See attached
Exhibit AAdditional numbers attached? ☒ Yes ☐ No

5. Name and address of party to whom correspondence concerning document should be mailed:

Name: Carrie B. KingsleyInternal Address: Fried, Frank, Harris, Shriver
& Jacobson LLPStreet Address: One New York PlazaCity: New York State: NY Zip: 10004-19806. Total number of applications and patents involved: 427. Total fee (37 CFR 3.41).....\$ 1680

- ☒ Enclosed
☒ Authorized to be charged to deposit account

8. Deposit account number:

06/0920 (if the enclosed check is insufficient)

DO NOT USE THIS SPACE

9. Signature.

Carrie B. Kingsley

Name of Person Signing

SignatureApril 12, 2004

Date

Total number of pages including cover sheet, attachments, and documents: 43

04/16/2004 ECOOPER 00000077 D335037

01 FC:8021

1680.00 DP

Mail documents to be recorded with required cover sheet information to:
Commissioner of Patents & Trademarks, Box Assignments
Washington, D.C. 20231PATENT
REEL: 015209 FRAME: 0370

Exhibit A

List of Patents and Patent Applications for Recordation of Security Interest
Conveying Party: AMF Bowling Products, Inc. (formerly known as AMF Bowling, Inc.)
Receiving Party: Credit Suisse First Boston, Cayman Islands Branch

Patents

Patent No.	Issue Date	Title
D335,037	04/27/90	CHAIR FOR BOWLING ALLEY
D351,888	10/25/94	BOWLING ALLEY BOUNCE BOARD
D366,510	01/23/96	BOWLING PIN STORAGE BIN FOR A PIN DELIVERY MECHANISM
D414,434	09/28/99	BOWLER TERMINAL WITH CRT (CONSOLE)
D416,208	11/09/99	BOWLING ALLEY CONSOLE
D427,802	07/11/00	BOWLING BALL RACK AND TABLE
RE35,232	05/07/96	BOWLING ALLEY BUMPER SYSTEM
5,173,016	12/22/92	APPARATUS AND METHOD FOR FORMING FINGER AND THUMB HOLES IN BOWLING BALLS
5,207,422	05/04/93	BOWLING ALLEY BUMPER SYSTEM
5,238,242	08/24/93	MODULAR BOWLING ALLEY PIT ASSEMBLY
5,243,728	09/14/93	MULTIPLE INDPENDENT VARIABLE SPEED TRANSFER ROLLERS FOR BOWLING LANE DRESSING APPARATUS
5,274,871	01/04/94	MULTIPLE TANKS FOR APPLYING LANE DRESSING TO TRANSFER ROLLER FOR BOWLING LANE DRESSING APPARATUS
5,330,412	07/19/94	BOWLING ALLEY PIT ASSEMBLY AND BOUNCE BOARD
5,358,448	10/25/94	BUMPER BOWLING GAME AND ERRATICALLY ROLLABLE WEIGHTED BOWLING BALL
5,417,616	05/23/95	SPRING BIASED BUMPER BOWLING SYSTEM

Exhibit A

List of Patents and Patent Applications for Recordation of Security Interest
Conveying Party: AMF Bowling Products, Inc. (formerly known as AMF Bowling, Inc.)
Receiving Party: Credit Suisse First Boston, Cayman Islands Branch

Patent No.	Issue Date	Title
5,679,162	10/21/97	APPARATUS FOR SELECTIVELY METERING DRESSING ONTO A BOWLING LANE SURFACE
5,624,322	04/29/97	BOWLING ALLEY RETURN AND STORAGE RACK
5,629,049	05/13/97	APPARATUS FOR SELECTIVELY METERING DRESSING ONTO A BOWLING LANE SURFACE
5,641,538	06/24/97	APPARATUS FOR SELECTIVELY METERING DRESSING ONTO A BOWLING LANE SURFACE
5,630,761	05/20/97	BOWLING BALL RETURN MECHANISM
5,649,868	07/22/97	HORIZONTAL BALL-RETURN MECHANISM
5,649,869	07/22/97	FLUORESCENT BOWLING PINS
5,779,554	07/14/98	THREE-DIMENSIONAL BOWLING ALLEY MASKING UNIT
5,800,274	09/01/98	BOWLING ALLEY BUMPER SYSTEM FOR PRODUCING VISUAL EFFECTS
5,857,918	01/12/99	BUMPER SYSTEM FOR A BOWLING ALLEY
5,868,629	02/09/99	BALL LIFT DEVICE AND METHOD
5,876,290	03/02/99	SHEET METAL PIN TABLE AND RESPOT ACTUATOR
4,900,024	02/13/90	BOWLING ALLEY BUMPER SYSTEM
5,405,295	04/11/95	BOWLING ALLEY BUMPER SYSTEM
5,439,418	08/08/95	MOLDED DISTRIBUTOR RECEIVER AND PIN STORAGE MAGAZINE
5,466,193	11/14/95	T-SHAPED FOUL LINE CONSTRUCTION JOINING LANE SECTIONS
4,887,813	12/19/89	BOWLING SCORING DISPLAY SYSTEM
D412,415	08/03/99	TABLE

Exhibit A

List of Patents and Patent Applications for Recordation of Security Interest
Conveying Party: AMF Bowling Products, Inc. (formerly known as AMF Bowling, Inc.)
Receiving Party: Credit Suisse First Boston, Cayman Islands Branch

Patent No.	Issue Date	Title
D416,600	11/16/99	BALL RETURN AND STORAGE RACK
4,920,604	05/01/90	AUTOMATIC VACUUM BOWLING LANE STRIPPER
4,962,565	10/16/90	AUTOMATIC VACUUM BOWLING LANE STRIPPER
4,959,884	10/02/90	COMBINATION BOWLING LANE STRIPPER AND DRESSING APPARATUS
4,856,138	08/15/89	BOWLING LANE VACUUM WITH FLOATING HEAD

Patent Applications

Application Number	Filing Date	Title
60/348,441	01/14/02	MOTORIZED BOWLING BALL RETURN MECHANISM WITH CLOSED LOOP FEEDBACK
09/591,345	06/09/00	A BOWLING LANE SYSTEM WITH LIGHT EMITTING ELEMENTS

444412

**Assignment of Security Interest
in United States Patents and Trademarks**

FOR GOOD AND VALUABLE CONSIDERATION, receipt and sufficiency of which are hereby acknowledged, AMF Bowling Products, Inc., a Virginia corporation (the "Assignor"), having its chief executive office at 8100 AMF Drive, Mechanicsville, VA 23111, hereby grants to Credit Suisse First Boston, Cayman Islands Branch, as Collateral Agent, (the "Assignee"), with offices at Eleven Madison Avenue, New York, NY 10010, a security interest in all of the Assignor's right, title and interest in, to and under the following (all of the following items or types of property being herein collectively referred to as the "Patent and Trademark Collateral"), whether presently existing or hereafter arising or acquired:

- (i) each United States patent and patent application, including each Patent and Patent Application referred to on Schedule A hereto;
- (ii) each Patent License, including each Patent License listed on Schedule A hereto;
- (iii) each United States trademark, trademark registration and trademark application, and all of the goodwill of the business connected with the use of, and symbolized by, each trademark, trademark registration and trademark application, including each Trademark, Trademark Registration and Trademark Application referred to in Schedule B hereto;
- (iv) each Trademark License, whether registered or not, including each Trademark License referred to in Schedule B hereto, and all of the goodwill of the business connected with the use of, and symbolized by, each Trademark; and
- (v) all products and proceeds of the foregoing, including any claim by the Assignor against third parties for past, present or future infringement of any Patent, or past, present or future infringement or dilution of any Trademark or Trademark registration, including any Patent or Trademark listed on Schedule A or B hereto, or under any Patent or Trademark licensed under any Patent License or Trademark License, including any such License listed on Schedule A or B hereto, or for injury to the goodwill associated with any Trademark, Trademark registration or Trademark License.

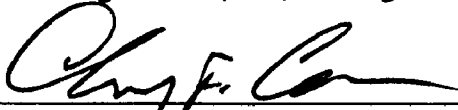
THIS GRANT is granted in conjunction with the security interests granted to the Assignee pursuant to the Security Agreement among the Assignor, the Assignee and certain other parties dated as of February 27, 2004, as amended, modified or supplemented from time to time (the "Security Agreement").

THIS GRANT has been granted in conjunction with the security interest granted to the Assignee under the Security Agreement. The rights and remedies of the Assignee with respect to the security interest granted herein are without prejudice to, and are in addition to those set forth in the Security Agreement, all terms and provisions of which are incorporated herein by reference. In the event that any provisions of this Assignment are deemed to conflict with the Security Agreement, the provisions of the Security Agreement shall govern.

ffny03\wuwe\535417.1

IN WITNESS WHEREOF, the undersigned have executed this Assignment as of the
27th day of February, 2004.

AMF Bowling Products, Inc., as Assignor

By: 
Name: Christopher F. Caesar
Title: Chief Financial Officer and
Vice President

CREDIT SUISSE FIRST BOSTON,
acting through its Cayman Islands branch,
as Collateral Agent

By: _____
Name: Robert Hetu
Title:

By: _____
Name:
Title:

STATE OF New York
County OF New York

The foregoing instrument was acknowledged before me this 26th day of February,
2004 by CHRISTOPHER F. CAESAR as CFO and Vice President of AMF Bowling Products,
Inc., a Virginia corporation, on behalf of AMF Bowling Products, Inc.

My commission expires: September 20, 2005

Notarial Seal

BRUCE WOHL
Notary Public, State of New York
No. 01WO5018106
Qualified in New York County
Commission Expires September 20, 2005


Notary Public

IN WITNESS WHEREOF, the undersigned have executed this Assignment as of the
27th day of February, 2004.

AMF Bowling Products, Inc., as Assignor

By: _____
Name: Christopher F. Caesar
Title: Chief Financial Officer and
Vice President

CREDIT SUISSE FIRST BOSTON,
acting through its Cayman Islands branch,
as Collateral Agent

By: [Signature]
Name: Robert Hetu
Title: Director

By: [Signature]
Name: CASSANDRA DROOGAN
Title: ASSOCIATE

STATE OF _____
_____ OF _____

The foregoing instrument was acknowledged before me this ____ day of _____,
20__ by _____ as _____ of AMF Bowling Products,
Inc., a Virginia corporation, on behalf of AMF Bowling Products, Inc.

My commission expires:

Notarial Seal

Notary Public

Schedule A to Patent and Trademark Assignment

AMF Bowling Products, Inc.

Part I

PATENTS AND PATENT APPLICATIONS

1. See the list of Patents and Patent Applications attached hereto as Exhibit A-I that is incorporated herein by reference.

Part II

PATENT LICENSES

1. Patent License Agreement (10/16/2000). Licensors: Joseph R. Infantino Licensee: AMF Bowling, Inc.

Patent: Bowling Pin with Improved Polymeric Coating

Exhibit A-1 to Patent and Trademark Assignment
AMF Bowling Products, Inc. (formerly known as AMF Bowling, Inc.)

US Patents

Page: 1

Client: **AMF B** **AMF Bowling Worldwide, Inc.**

Title	Case Number Status	Application	Patent No.	Attorney(s)	Next Actions(s)	Due (Date(s))
CHAIR FOR BOWLING ALLEY United States of America Client Ref No: 2020594-3002	70003002	01 07/572,797	D335,037	PEM	Patent Expires 1 Year	27-Apr-2006
	Granted	27-Aug-1990	27-Apr-1993		Patent Expires 6 Months	27-Oct-2006
	Owner: AMBIN				Patent Expires 3 Months	27-Jan-2007
					Patent Expires 2 Months	27-Feb-2007
					Patent Expires 1 Month	27-Mar-2007
					Patent Expires	27-Apr-2007
BOWLING ALLEY BOUNCE BOARD United States of America Client Ref No: 2020594-3003	70003003	01 010,584	D351,888	PEM	Patent Expires 1 Year	25-Oct-2007
	Granted	13-Jul-1993	25-Oct-1994		Patent Expires 6 Months	25-Apr-2008
	Owner: AMBIN				Patent Expires 3 Months	25-Jul-2008
	Abstract: The ornamental design of the bowling alley bounce board				Patent Expires 2 Months	25-Aug-2008
					Patent Expires 1 Month	25-Sep-2008
					Patent Expires	25-Oct-2008
BOWLING PIN STORAGE BIN FOR A PIN DELIVERY MECHANISM United States of America Client Ref No: 2020594-3004	70003004	01 29/034,199	D366,510	PEM	Patent Expires 1 Year	23-Jan-2009
	Granted	30-Jan-1995	23-Jan-1996		Patent Expires 6 Months	23-Jul-2009
	Owner: AMBIN				Patent Expires 3 Months	23-Oct-2009
					Patent Expires 2 Months	23-Nov-2009
					Patent Expires 1 Month	23-Dec-2009
					Patent Expires	23-Jan-2010
BOWLER TERMINAL WITH CRT (CONSOLE) United States of America Client Ref No: 2020594-3006	70003006	01 29/090,256	D414,434	PEM	Patent Expires 1 Year	28-Sep-2012
	Granted	02-Jul-1998	28-Sep-1999		Patent Expires 6 Months	28-Mar-2013
	Owner: AMBIN				Patent Expires 3 Months	28-Jun-2013
					Patent Expires 2 Months	28-Jul-2013
					Patent Expires 1 Month	28-Aug-2013
					Patent Expires	28-Sep-2013

PATENT

REEL: 015209 FRAME: 0378

Exhibit A-1 to Patent and Trademark Assignment

AMF Bowling Products, Inc. (formerly known as AMF Bowling, Inc.)

US Patents

Wednesday, February 11, 2004

Client: AMF B

AMF Bowling Worldwide, Inc.

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Title	Case Number Status	Application	Patent No.	Attorney(s) Next Actions(s)	Due (Date(s))
BOWLING ALLEY CONSOLE United States of America Client Ref No: 2020594-3007	70003007 Granted Owner: AMBIN	01 29/090,257 02-Jul-1998	D416,208 09-Nov-1999	PEM Patent Expires 1 Year Patent Expires 6 Months Patent Expires 3 Months Patent Expires 2 Months Patent Expires 1 Month Patent Expires	09-Nov-2012 09-May-2013 09-Aug-2013 09-Sep-2013 09-Oct-2013 09-Nov-2013
BOWLING BALL RACK AND TABLE United States of America Client Ref No: 2020594-3009	70003009 Granted Owner: AMBIN	01 29/090,259 02-Jul-1998	D427,802 11-Jul-2000	PEM Patent Expires 1 Year Patent Expires 6 Months Patent Expires 3 Months Patent Expires 2 Months Patent Expires 1 Month Patent Expires	11-Jul-2013 11-Jan-2014 11-Apr-2014 11-May-2014 11-Jun-2014 11-Jul-2014
BOWLING ALLEY BUMPER SYSTEM United States of America Client Ref No: 2020594-3010	70003010 Granted Owner: AMBIN Abstract: A bowling alley bumper system which can be used for conventional bowling and for bumper bowling is disclosed. The bowling alley bumper system includes a pair of gutters having longitudinally extending portions and extending and retracting means for moving those portions into an extended position which allows bowling balls to fall into and roll along one of the gutters. In one embodiment, the portion is moved upwardly or downwardly along an arc in an xz plane with little or no lateral movement.	02 111595 25-Aug-1993	RE35,232 07-May-1996	PEM Reminder 11.5 Tax due 3 months Reminder 11.5 Tax due 1 month Tax 11.5 Patent Expires 1 Year Patent Expires 6 Months Patent Expires 3 Months Patent Expires 2 Months Patent Expires 1 Month Patent Expires	26-Apr-2004 26-Jun-2004 26-Jul-2004 25-Aug-2012 25-Feb-2013 25-May-2013 25-Jun-2013 25-Jul-2013 25-Aug-2013

Remarks Reissue of U.S. Patent No. 5,181,716

Exhibit A-1 to Patent and Trademark Assignment
AMF Bowling Products, Inc. (formerly known as AMF Bowling, Inc.)

US Patents

Wednesday, February 11, 2004

Client: **AMF B** **AMF Bowling Worldwide, Inc.**

Client Status Report

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Title	Case Number Status	Application	Patent No.	Attorney(s)	Next Actions(s)	Due (Date(s))
APPARATUS AND METHOD FOR FORMING FINGER AND THUMB HOLES IN BOWLING BALLS	70003038 Granted	01 687,585 17-Apr-1991	5,173,016 22-Dec-1992	PEM	Reminder 11.5 Tax due 3 months Reminder 11.5 Tax due 1 month	22-Mar-2004 22-May-2004
	Owner: AMBIN					
	Abstract: A vacuum dish (10) is rigidly bolted (60) to the support table (12) of a milling machine (14). A bowling ball (74) is set down onto the upwardly directed hard rim (72) of the vacuum dish (10). An elastomeric seal (86) is moved upwardly along the sidewall (66) of the vacuum dish (10), onto an upwardly converging conical surface (70) which borders the rim (72). This puts the elastomeric seal (86) into contact with both the conical					
United States of America					Tax 11.5	22-Jun-2004
Client Ref No: 2020594-3038					Patent Expires 1 Year	17-Apr-2010
					Patent Expires 6 Months	17-Oct-2010
					Patent Expires 6 Months	17-Oct-2010
					Patent Expires 3 Months	17-Jan-2011
					Patent Expires 2 Months	17-Feb-2011
					Patent Expires 1 Month	17-Mar-2011
				Patent Expires	17-Apr-2011	

Exhibit A-1 to Patent and Trademark Assignment
AMF Bowling Products, Inc. (formerly known as AMF Bowling, Inc.)

US Patents

Wednesday, February 11, 2004

Client: **AMF B** **AMF Bowling Worldwide, Inc.**

Client Status Report

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Title	Case Number Status	Application	Patent No.	Attorney(s) Next Actions(s)	Due (Date(s))
BOWLING ALLEY BUMPER SYSTEM United States of America Client Ref No: 2020594-3040	70003040 Granted Owner: AMBIN Abstract: An improved bowling alley bumper system for selectively guarding against the throwing of gutter balls. An elongated guard is supported alongside the gutter and can be pivotally retracted or extended between a first position in which the gutter is exposed and unguarded and a second position in which gutter entry by a bowling ball is precluded by constructing the predominant portion of the system of prefabricated modular sections of relatively lightweight component parts, they can be longitudinally positioned end-to-end enabling significant cost savings to be realized for both fabrication and installation.	01 842,005 25-Feb-1992	5,207,422 04-May-1993	PEM Reminder 11.5 Tax due 6 months Reminder 11.5 Tax due 3 months Reminder 11.5 Tax due 1 month Tax 11.5 Patent Expires 1 Year Patent Expires 6 Months Patent Expires 3 Months Patent Expires 2 Months Patent Expires 1 Month Patent Expires	04-May-2004 04-Aug-2004 04-Oct-2004 04-Nov-2004 25-Feb-2011 25-Aug-2011 25-Nov-2011 25-Dec-2011 25-Jan-2012 25-Feb-2012
MODULAR BOWLING ALLEY PIT ASSEMBLY United States of America Client Ref No: 2020594-3041	70003041 Granted Owner: AMBIN Abstract: A modular bowling alley pit assembly includes a drawer-like structure which is adapted for positioning within the pit area at one end of a bowling alley. The modular assembly also includes a pair of rollers and an endless belt which passes around the rollers for moving fallen pins rearwardly from the alley and ball deflecting means for moving a ball toward a ball return mechanism. A forward one of said rollers also defines an uninterrupted surface about the roller. The assembly also includes a pair of angularly disposed tracking rollers for engaging the endless belt and the entire assembly is readily removed from the pit area for replacement or repair.	01 559,084 30-Jul-1990	5,238,242 24-Aug-1993	PEM Reminder 11.5 Tax due 1 yr. Reminder 11.5 Tax due 6 months Reminder 11.5 Tax due 3 months Reminder 11.5 Tax due 1 month Tax 11.5 Patent Expires 1 Year Patent Expires 6 Months Patent Expires 3 Months Patent Expires 2 Months Patent Expires 1 Month Patent Expires	24-Feb-2004 24-Aug-2004 24-Nov-2004 24-Jan-2005 24-Feb-2005 24-Aug-2009 24-Feb-2010 24-May-2010 24-Jun-2010 24-Jul-2010 24-Aug-2010

Exhibit A-1 to Patent and Trademark Assignment
AMF Bowling Products, Inc. (formerly known as AMF Bowling, Inc.)

US Patents

Wednesday, February 11, 2004

Client: **AMF B** **AMF Bowling Worldwide, Inc.**

Client Status Report

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Title	Case Number Status	Application	Patent No.	Attorney(s) Next Actions(s)	Due (Date(s))
MULTIPLE INDEPENDENT VARIABLE SPEED TRANSFER ROLLERS FOR BOWLING LANE DRESSING APPARATUS United States of America Client Ref No: 2020594-3042	70003042 Granted	02 07/974,285 10-Nov-1992	5,243,728 14-Sep-1993	PEM Reminder 11.5 Tax due 1 year Reminder 11.5 Tax due 6 months Reminder 11.5 Tax due 3 months Reminder 11.5 Tax due 1 month Tax 11.5 Patent Expires 1 Year Patent Expires 6 Months Patent Expires 3 Months Patent Expires 2 Months Patent Expires 1 Month Patent Expires	14-Mar-2004 14-Sep-2004 14-Dec-2004 14-Feb-2005 14-Mar-2005 15-Oct-2010 15-Apr-2011 15-Jul-2011 15-Aug-2011 15-Sep-2011 15-Oct-2011

Owner: AMBIN

Abstract: In one embodiment, a bowling lane dressing apparatus has a carriage. With a lane buffer roller and a transfer roller in rolling engagement with the lane buffer roller and in fluid communication with a reservoir containing lane dressing fluid for transferring fluid from the reservoir to the lane buffing roller. A variable speed drive is connected to the transfer roller for rotating it at variable speeds to vary the rate of transfer of fluid from the reservoir to the lane buffer roller. In a second embodiment, the transfer roller is separated into independently rotatable roller segments, each of which can be driven by separate variable speed motors. The segments may comprise a center roller segment driven by one variable speed motor, a pair of track roller segments at opposite ends of the center roller segment, respectively, driven by a second variable speed motor, and a pair of outer roller segments at opposite outer ends of said track roller segments, respectively, driven by a third variable speed motor. In a third embodiment, each roller is driven by a separate variable speed motor.

Exhibit A-1 to Patent and Trademark Assignment

AMF Bowling Products, Inc. (formerly known as AMF Bowling, Inc.)

US Patents

Wednesday, February 11, 2004

Client: AMF B

AMF Bowling Worldwide, Inc.

Client Status Report

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Title	Case Number Status	Application	Patent No.	Attorney(s) Next Actions(s)	Due (Date(s))
MULTIPLE TANKS FOR APPLYING LANE DRESSING TO TRANSFER ROLLER FOR BOWLING LANE DRESSING APPARATUS United States of America	70003043 Granted	03 09/071,853 07-Jun-1993	5,274,871 04-Jan-1994	PEM Reminder 11.5 Tax due 1 year Reminder 11.5 Tax due 6 months Reminder 11.5 Tax due 3 months Reminder 11.5 Tax due 1 month Tax 11.5	04-Jul-2004 04-Jan-2005 04-Apr-2005 04-Jun-2005 04-Jul-2005 15-Oct-2010 15-Apr-2011 15-Jul-2011

Owner: AMBIN

Client Ref No: 2020594-3043

Abstract: A bowling lane dressing apparatus for use on a bowling alley has a carriage with a lane buffer roller. A transfer roller in rolling engagement with the lane buffer roller and in fluid communication with a plurality of reservoirs, each containing lane dressing fluid for transferring fluid from each reservoir by a wick therein to the lane buffing roller. Each reservoir is pivotally mounted for independent movement to bring its wick into or out of engagement with the transfer roller. A variable speed drive is connected to the transfer roller for rotating it at variable speeds to vary the rate of transfer of fluid from each reservoir to the lane buffer roller. If desired, the transfer roller can be separated into independently rotatable roller segments, each of which can be driven by separate variable speed motors. The roller segments and the wick of the reservoir associated with that roller segment may be of substantially equal widths.

PATENT

REEL: 015209 FRAME: 0383

Exhibit A-1 to Patent and Trademark Assignment

AMF Bowling Products, Inc. (formerly known as AMF Bowling, Inc.)

US Patents

Wednesday, February 11, 2004

Client: AMF B

AMF Bowling Worldwide, Inc.

Client Status Report

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Title	Case Number Status	Application	Patent No.	Attorney(s)	Next Actions(s)	Due (Date(s))
BOWLING ALLEY PIT ASSEMBLY AND BOUNCE BOARD United States of America	70003044 Granted Owner: AMBIN Abstract: A bowling alley pit assembly for transferring bowling pins and balls to a pin elevator and ball return includes a base member having a forward and rear portion and a pair of laterally-spaced walls. The base member is disposed in a pit area of the bowling alley with the forward portion adjacent to the pin deck and the rear portion adjacent a pin elevating mechanism. A pair of rollers are disposed between the spaced walls and a motor is operatively connected to one of the rollers. A pit-wide endless belt passes around the rollers for moving fallen pins rearwardly away from the pin deck. The pit assembly also includes a one-piece or unitary, generally hollow, plastic bounce board disposed between the upper and lower portions of the endless belt and between the pair of rollers. The bounce board is transverse to the alley and defines two side-by-side, relatively flat portions which slope downwardly to form a shallow trough with a recessed area at one end thereof. The bounce board also includes a plurality of reinforcing members therein which support the upper panel or surface thereof.	01 90,310 13-Jul-1993	5,330,412 19-Jul-1994	PEM	Reminder 11.5 Tax due 1 yr. Reminder 11.5 Tax due 6 months Reminder 11.5 Tax due 3 months Reminder 11.5 Tax due 1 month Tax 11.5 Patent Expires 1 Year Patent Expires 6 Months Patent Expires 3 Months Patent Expires 2 Months Patent Expires 1 Month Patent Expires	19-Jan-2005 19-Jul-2005 19-Oct-2005 19-Dec-2005 19-Jan-2006 13-Jul-2012 13-Jan-2013 13-Apr-2013 13-May-2013 13-Jun-2013 13-Jul-2013

Remarks 7.5 tax - reminder/authorization sent to client 10/19/01

Exhibit A-1 to Patent and Trademark Assignment
AMF Bowling Products, Inc. (formerly known as AMF Bowling, Inc.)

US Patents

Wednesday, February 11, 2004

Client: **AMF B** **AMF Bowling Worldwide, Inc.**

Client Status Report

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Title	Case Number Status	Application	Patent No.	Attorney(s) Next Actions(s)	Due (Date(s))
BUMPER BOWLING GAME AND ERRATICALLY ROLLABLE WEIGHTED BOWLING BALL	70003045 Granted	01 90,240 13-Jul-1993	5,358,448 25-Oct-1994	PEM Reminder 11.5 Tax due 1 yr. Reminder 11.5 Tax due 6 months	25-Apr-2005 25-Oct-2005
United States of America Client Ref No: 2020594-3045	Owner: AMBIN Abstract: A bumper bowling game includes an elongated bowling lane and a pair of gutters alongside of the lane. The game also includes a foul line and pin deck at opposite ends of the lane and a plurality of pins on the pin deck. A pair of bumpers temporarily block the gutters to prevent a bowling ball from falling into the gutters. The gutters also redirect a bowling ball which strikes them toward the pins. The game also includes a bowling ball which includes a plurality of finger holes and an eccentric weight for causing the ball to follow an erratic path. The weight may be a fixed weight, free moving within a hollow core, or pendulum-like.			Reminder 11.5 Tax due 3 months Reminder 11.5 Tax due 1 month Tax 11.5	25-Jan-2006 25-Mar-2006 25-Apr-2006
				Patent Expires 1 Year Patent Expires 6 Months Patent Expires 3 Months	13-Jul-2012 13-Jan-2013 13-Apr-2013
				Patent Expires 2 Months Patent Expires 1 Month Patent Expires	13-May-2013 13-Jun-2013 13-Jul-2013

SPRING BIASED BUMPER BOWLING
SYSTEM

7-169453
05-Jul-1995
PEM

Japan
Owner: AMBIN

Client Ref No: 2020594-3048

Abstract: A bowling alley bumper system which can be used for conventional bowling and for bumper bowling is disclosed. The bowling alley bumper system includes a pair of gutters having longitudinally extending portions and spring biased extending and retracting mechanisms for moving those portions (bumpers) into an extended position to prevent a bowling ball from falling into a gutter and downwardly into a retracted position which allows bowling balls to fall into and roll along one of the gutters. In one embodiment, the portion is moved upwardly or downwardly along an arc in an XZ plane with little or no lateral movement, and the spring biased mechanism retains the bumpers

Exhibit A-1 to Patent and Trademark Assignment

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in their extended and retracted positions. The spring biased mechanism also causes the bumpers to "pop-up" when moved out of the recessed position.

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Title	Case Number Status	Application	Patent No.	Attorney(s)	Next Actions(s)	Due (Date(s))
SPRING BIASED BUMPER BOWLING SYSTEM United States of America Client Ref No: 2020594-3048	70003048 Granted	01 08/271,724 07-Jul-1994	5,417,616 23-May-1995	PEM	Reminder 11.5 Tax due 1 yr. Reminder 11.5 Tax due 6 months Reminder 11.5 Tax due 3 months Tax 11.5 due 2 mos. Reminder 11.5 Tax due 1 month Tax 11.5	23-Nov-2005 23-May-2006 23-Aug-2006 23-Sep-2006 23-Oct-2006 23-Nov-2006
	Owner: AMBIN Abstract: A bowling alley bumper system which can be used for conventional bowling and for bumper bowling is disclosed. The bowling alley bumper system includes a pair of gutters having longitudinally extending portions and spring biased extending and retracting mechanisms for moving those portions (bumpers) into an extended position to prevent a bowling ball from falling into a gutter and downwardly into a retracted position which allows bowling balls to fall into and roll along one of the gutters. In one embodiment, the portion is moved upwardly or downwardly along an arc in an XZ plane with little or no lateral movement, and the spring biased mechanism retains the bumpers in their extended and retracted positions. The spring biased mechanism also causes the bumpers to "pop-up" when moved out of the recessed position.				Patent Expires 1 Year Patent Expires 6 Months Patent Expires 3 Months	07-Jul-2013 07-Jan-2014 07-Apr-2014
					Patent Expires 2 Months Patent Expires 1 Month Patent Expires	07-May-2014 07-Jun-2014 07-Jul-2014

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Title	Status	Attorney(s)	Next Actions(s)	Due (Date(s))	
APPARATUS FOR SELECTIVELY METERING DRESSING ONTO A BOWLING LANE SURFACE	70003052	02	Reminder 7.5 Tax due 1 yr	21-Apr-2004	
	Granted	08/618,256	Reminder 7.5 Tax due 6 months	21-Oct-2004	
		18-Mar-1996			
United States of America Client Ref No: 2020594-3052	Owner: AMBIN	5,679,162	Reminder 7.5 Tax due 3 months	21-Jan-2005	
	Abstract: An apparatus applies dressing fluid to a bowling lane surface in a discrete pattern laterally across a plurality of zones on the bowling lane. A carriage, for movement along a bowling lane, has an applicator mounted thereon for applying the dressing fluid to the bowling lane surface. Dressing fluid is supplied from a reservoir by a plurality of pulse valves which supply the dressing fluid to a plurality of fluid dispersion chambers, each having an inlet connected to one of the pulse valves and having an outlet positioned to apply dressing fluid to the applicator. The outlet has a width equal to the width of one of the zones. A controller is provided for selectively activating each of the pulse valves to discharge a discrete amount of fluid dressing into each dispersion chamber. Each zone may be the width of one board across the bowling alley so that different discrete amounts of oil can be applied to each board. A method is provided to supply discrete amounts of bowling lane dressing to each of a plurality of zones wherein each zone is one board width or portion of a board width.	21-Oct-1997	Reminder 7.5 Tax due 1 month	21-Mar-2005	
		Tax 7.5			21-Apr-2005
			Reminder 11.5 Tax due 1 yr	21-Apr-2008	
			Reminder 11.5 Tax due 6 months	21-Oct-2008	
			Reminder 11.5 Tax due 3 months	21-Jan-2009	
			Reminder 11.5 Tax due 1 month	21-Mar-2009	
			Tax 11.5	21-Apr-2009	
			Patent Expires 1 Year	10-Nov-2013	
			Patent Expires 6 Months	10-May-2014	
			Patent Expires 3 Months	10-Aug-2014	
			Patent Expires 2 Months	10-Sep-2014	
			Patent Expires 1 Month	10-Oct-2014	
			Patent Expires	10-Nov-2014	

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Title	Case Number Status	Application	Patent No.	Attorney(s) Next Actions(s)	Due (Date(s))
BOWLING ALLEY RETURN AND STORAGE RACK United States of America Client Ref No: 2020594-3054	70003054 Granted Owner: AMBIN Abstract: A bowling alley ball return and storage rack includes an infeed track and a pair of parallel generally horizontal storage racks disposed on opposite sides of the infeed track. An S-shaped member acts as a stop for directing a first bowling ball to a first of the storage racks and for positioning the ball therein so that a subsequently returned ball will be deflected by the first ball into the opposite storage rack. The ball return and storage rack includes an infeed track which is generally parallel to and forms a part of the storage racks. This infeed track has a slight downward slope of about 1.degree. from horizontal to bring the bowling balls toward the opposite end thereof. The storage racks also include inner and outer rails, i.e., metallic tubular members which are covered with a nylon 6 coating.	01 08/636,383 23-Apr-1996	5,624,322 29-Apr-1997	PEM Reminder 7.5 Tax due 6 months Reminder 7.5 Tax due 3 months Reminder 7.5 Tax due 1 month Tax 7.5 Reminder 11.5 Tax due 1 yr. Reminder 11.5 Tax due 6 months Reminder 11.5 Tax due 3 months Reminder 11.5 Tax due 1 month Tax 11.5 Patent Expires 1 Year Patent Expires 6 Months Patent Expires 3 Months Patent Expires 2 Months Patent Expires 1 Month Patent Expires	29-Apr-2004 29-Jul-2004 29-Sep-2004 29-Oct-2004 29-Oct-2007 29-Apr-2008 29-Jul-2008 29-Sep-2008 29-Oct-2008 23-Apr-2015 23-Oct-2015 23-Jan-2016 23-Feb-2016 23-Mar-2016 23-Apr-2016

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APPARATUS FOR SELECTIVELY METERING DRESSING ONTO A BOWLING LANE SURFACE	70003055 Granted	02 08/618,255 18-Mar-1996	5,629,049 13-May-1997	PEM
United States of America	Owner: AMBIN			
Client Ref No: 2020594-3055	Abstract: An apparatus applies dressing fluid to a bowling lane surface in a discreet pattern laterally across a plurality of zones on the bowling lane. A carriage, for movement along a bowling lane, has an applicator mounted thereon for applying the dressing fluid to the bowling lane surface. Dressing fluid is supplied from a reservoir by a plurality of pulse valves which supply the dressing fluid to a plurality of fluid dispersion chambers, each having an inlet connected to one of the pulse valves and having an outlet positioned to apply dressing fluid to the applicator. The outlet has a width equal to the width of one of the zones. A controller is provided for selectively activating each of the pulse valves to discharge a discrete amount of fluid dressing into each dispersion chamber. Each zone may be the width of one board across the bowling alley so that different discrete amounts of oil can be	Reminder 7.5 Tax due 6 months	13-May-2004	
		Reminder 7.5 Tax due 3 months	13-Aug-2004	
		Reminder 7.5 Tax due 1 month	13-Oct-2004	
		Tax 7.5	13-Nov-2004	
		Reminder 11.5 Tax due 1 yr	13-Nov-2007	
		Reminder 11.5 Tax due 1 yr	13-Nov-2007	
		Reminder 11.5 Tax due 6 months	13-May-2008	
		Reminder 11.5 Tax due 3 months	13-Aug-2008	
		Reminder 11.5 Tax due 1 month	13-Oct-2008	
		Tax 11.5	13-Nov-2008	
Patent Expires 1 Year	10-Nov-2013			
Patent Expires 6 Months	10-May-2014			
Patent Expires 3 Months	10-Aug-2014			
Patent Expires 2 Months	10-Sep-2014			
Patent Expires 1 Month	10-Oct-2014			
Patent Expires	10-Nov-2014			

Remarks Foreign Filing License Granted 05/09/96

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APPARATUS FOR SELECTIVELY METERING DRESSING ONTO A BOWLING LANE SURFACE	70003055 Granted	03 08/547,171 24-Oct-1995	PEM 5,641,538 24-Jun-1997	Reminder 7.5 Tax due 6 months Reminder 7.5 Tax due 3 months	24-Jun-2004 24-Sep-2004
	United States of America Client Ref No: 2020594-3055	Owner: AMBIN Abstract: An apparatus applies dressing fluid to a bowling lane surface in a discreet pattern laterally across a plurality of zones on the bowling lane. A carriage, for movement along a bowling lane, has an applicator mounted thereon for applying the dressing fluid to the bowling lane surface. Dressing fluid is supplied from a reservoir by a plurality of pulse valves which supply the dressing fluid to a plurality of fluid dispersion chambers, each having an inlet connected to one of the pulse valves and having an outlet positioned to apply dressing fluid to the applicator. The outlet has a width equal to the width of one of the zones. A controller is provided for selectively activating each of the pulse valves to discharge a discrete amount of fluid dressing into each dispersion chamber. Each zone may be the width of one board across the bowling alley so that different discrete amounts of oil can be applied to each board. A method is provided to supply discreet amounts of bowling lane dressing to each of a plurality of zones wherein each zone is one board width or portion of a board width.	Reminder 7.5 Tax due 1 month Tax 7.5 Reminder 11.5 Tax due 1 year Reminder 11.5 Tax due 1 year Reminder 11.5 Tax due 6 months Reminder 11.5 Tax due 3 months Reminder 11.5 Tax due 1 month	24-Nov-2004 24-Dec-2004 24-Dec-2007 24-Dec-2007 24-Jun-2008 24-Sep-2008 24-Nov-2008	
			Tax 11.5 Patent Expires 1 Year Patent Expires 6 Months Patent Expires 3 Months	24-Dec-2008 10-Nov-2013 10-May-2014 10-Aug-2014	
			Patent Expires 2 Months Patent Expires 1 Month Patent Expires	10-Sep-2014 10-Oct-2014 10-Nov-2014	

Remarks Foreign Filing License Granted 01/23/96

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BOWLING BALL RETURN MECHANISM United States of America Client Ref No: 2020594-3056	70003056 Granted	01 08/615,900 14-Mar-1996	5,630,761 20-May-1997	PEM	Reminder 7.5 Tax due 6 months Reminder 7.5 Tax due 3 months Reminder 7.5 Tax due 1 month Tax 7.5	20-May-2004 20-Aug-2004 20-Oct-2004 20-Nov-2004
	Owner: AMBIN					
	Abstract: A bowling alley return mechanism includes a horizontal ball return disposed between two adjacent lanes, a pair of side walls which define a chamber and a ball door or opening in one of the side walls. A generally crescent-shaped concave pivotally mounted cradle is disposed within the chamber and adjacent to the opening for receiving a bowling ball thereon. The mechanism also includes an optical sensor which is responsive to a portion of the bowling ball when the bowling ball is on the cradle. A bell crank and linkage rotates the cradle in response to a signal from the sensor. The mechanism also includes an exit door and a releasable locking assembly of the pin and groove type which prevents any flying pins from passing through the exit door. The locking assembly is responsive to an upper portion of a bowling ball when the ball is moved by the cradle to unlock the exit door and allow the ball to pass therethrough and into the horizontal ball return for propulsion to the opposite end of the alley. In addition the mechanism includes an oscillating paddle for removing pins from the chamber and for preventing more than one ball from entering the chamber at the same time.				Reminder 11.5 Tax due 1 yr. Reminder 11.5 Tax due 6 months	20-Nov-2007 20-May-2008
					Reminder 11.5 Tax due 3 months Reminder 11.5 Tax due 1 month Tax 11.5	20-Aug-2008 20-Oct-2008 20-Nov-2008
					Patent Expires 1 Year Patent Expires 6 Months Patent Expires 3 Months Patent Expires 2 Months	14-Mar-2015 14-Sep-2015 14-Dec-2015 14-Jan-2016
					Patent Expires 1 Month Patent Expires	14-Feb-2016 14-Mar-2016

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Title	Case Number Status	Application	Patent No.	Attorney(s) Next Actions(s)	Due (Date(s))
HORIZONTAL BALL-RETURN MECHANISM	70003058 Granted	01 08/682,291 17-Jul-1996	5,649,868 22-Jul-1997	Reminder 7.5 Tax due 6 months Reminder 7.5 Tax due 3 months Reminder 7.5 Tax due 1 month Tax 7.5	22-Jul-2004 22-Oct-2004 22-Dec-2004 22-Jan-2005
United States of America Client Ref No: 2020594-3058	Owner: AMBIN Abstract: A horizontal ball return mechanism for propelling a bowling ball from one end of a bowling alley to the other includes a generally horizontal track with compression and decompression sections and a generally flat horizontal section therebetween. Two pulleys and an endless belt move a bowling ball along the track. The compression, decompression and a flat horizontal section lift a bowling ball upwardly against the belt, maintain the belt under compression as the ball moves along the generally flat section and lowers the ball before it passes under a second of the pulleys.	Reminder 11.5 Tax due 1 yr. Reminder 11.5 Tax due 6 months			22-Jan-2008 22-Jul-2008
		Reminder 11.5 Tax due 3 months Reminder 11.5 Tax due 1 month Tax 11.5			22-Oct-2008 22-Dec-2008 22-Jan-2009
		Patent Expires 1 Year Patent Expires 6 Months Patent Expires 3 Months Patent Expires 2 Months Patent Expires 1 Month Patent Expires			17-Jul-2015 17-Jan-2016 17-Apr-2016 17-May-2016 17-Jun-2016 17-Jul-2016

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Title	Case Number Status	Application	Patent No.	Attorney(s) Next Actions(s)	Due (Date(s))
FLUORESCENT BOWLING PINS	70003059 Granted	01 688,812 31-Jul-1996	5,649,869 22-Jul-1997	PEM Reminder 7.5 Tax due 6 months Reminder 7.5 Tax due 3 months Tax 7.5 due 2 mos.	22-Jul-2004 22-Oct-2004 22-Nov-2004
United States of America Client Ref No: 2020594-3059	Owner: AMBIN Abstract: A bowling pin for use with an automatic scorer includes a wood core and an ionomer cladding having an outer surface which surrounds the standing portion of the pin. The pin includes a first fluorescent coating on the outer surface in a preselected area, preferably in the neck portion of the pin. This first fluorescent coating emits a relatively high level of visible light when subjected to ultraviolet light. A second fluorescent coating, which is colorless under ambient light, covers the standing portion of the pin, including the first fluorescent coating and emits a relatively low level of visible light, i.e., the moon glow effect. The second coating also allows the relatively high-intensity visible light which is emitted from the first fluorescent coating to pass therethrough for detection by an automatic scorer.	Reminder 7.5 Tax due 1 month Tax 7.5 Reminder 11.5 Tax due 1 yr.			22-Dec-2004 22-Jan-2005 22-Jan-2008
		Reminder 11.5 Tax due 6 months Reminder 11.5 Tax due 3 months Tax 11.5 due 2 mos.			22-Jul-2008 22-Oct-2008 22-Nov-2008
		Reminder 11.5 Tax due 1 month Tax 11.5 Patent Expires 1 Year Patent Expires 6 Months			22-Dec-2008 22-Jan-2009 31-Jul-2015 31-Jan-2016
		Patent Expires 3 Months Patent Expires 2 Months Patent Expires 1 Month Patent Expires			30-Apr-2016 31-May-2016 30-Jun-2016 31-Jul-2016

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Title	Case Number Status	Application	Patent No.	Attorney(s) Next Actions(s)	Due (Date(s))
THREE-DIMENSIONAL BOWLING ALLEY MASKING UNIT United States of America Client Ref No: 2020594-3061	70003061 Granted Owner: AMBIN Abstract: A bowling alley masking unit comprising a pin curtain and a plurality of separate panels which are disposed laterally across at least one longitudinally extending bowling lane. The panels are disposed in a three-dimensional array with lateral and or longitudinal spacing in a overlapping arrangement. Each of the panels is supported by a forwardly extending bracket or cantilever.	01 08/828,335 28-Mar-1997	5,779,554 14-Jul-1998	PEM Reminder 7.5 Tax due 6 months Reminder 7.5 Tax due 3 months Reminder 7.5 Tax due 1 month Tax 7.5 Reminder 11.5 Tax due 1 yr. Reminder 11.5 Tax due 6 months Reminder 11.5 Tax due 3 months Reminder 11.5 Tax due 1 month Tax 11.5 Patent Expires 1 Year Patent Expires 6 Months Patent Expires 3 Months Patent Expires 2 Months Patent Expires 1 Month Patent Expires	14-Jan-2005 14-Jul-2005 14-Oct-2005 14-Dec-2005 14-Jan-2006 14-Jan-2009 14-Jul-2009 14-Oct-2009 14-Dec-2009 14-Jan-2010 28-Mar-2016 28-Sep-2016 28-Dec-2016 28-Jan-2017 28-Feb-2017 28-Mar-2017

Remarks 3.5 tax - reminder/authorization sent to client 10/19/01

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Title	Status	Attorney(s)	Next Actions(s)	Due (Date(s))
BOWLING ALLEY BUMPER SYSTEM FOR PRODUCING VISUAL EFFECTS United States of America Client Ref No: 2020594-3062	70003062	01	08/717,237	5,800,274
	Granted		20-Sep-1996	01-Sep-1998
	Owner: AMBIN			
	Abstract: A bowling alley bumper system includes a pair of elongated bumpers extending along the length of an alley for guarding the gutters of a bowling alley when the bumpers are in an extended or guarding position. Each of the bumpers also includes a string of lights within a clear plastic rail which is disposed along an upper portion of the bumper. A controller is provided for pulsing the lights along each of the bumpers to produce a "chase" or other visual effect. For example, the controller may be used to illuminate the first, fourth, seventh, etc. lights in a string, followed by the illumination of the second, fifth, eighth, etc., lights, and then the third, sixth, ninth, etc., lights to give the appearance of moving down the alley. A controller may also be used to regulate the illumination of the lights across adjacent alleys.			

PATENT

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Title	Status	Attorney(s)	Next Actions(s)	Due (Date(s))
BUMPER SYSTEM FOR A BOWLING ALLEY United States of America Client Ref No: 2020594-3063	70003063	01	08/903,007	5,857,918
	Granted		30-Jul-1997	12-Jan-1999
	Owner: AMBIN			
	Abstract: A bowling alley bumper system which can be used for conventional bowling and for bumper bowling includes a bumper on each side of the alley. These bumpers are movable between an extended positioned to prevent a bowling ball from falling into a gutter and a retracted position for ordinary bowling. The system also includes a plurality of air cylinders and an electrical actuator for moving the bumpers between the two positions. In a preferred embodiment of the invention, a computer which is included in an automatic scorer, automatically raises and lowers the bumpers before and after an individual bowler who elects bumper bowling and at the same time elects to bowl with regular bowlers.			
	Reminder 7.5 Tax due 1 yr			12-Jul-2005
	Reminder 7.5 Tax due 6 months			12-Jan-2006
	Reminder 7.5 Tax due 3 months			12-Apr-2006
	Tax 7.5 due 2 mos.			12-May-2006
	Reminder 7.5 Tax due 1 month			12-Jun-2006
	Tax 7.5			12-Jul-2006

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BALL LIFT DEVICE AND METHOD United States of America Client Ref No: 2020594-3064	70003064 Granted	01 09/017,579 03-Feb-1998	5,868,629 09-Feb-1999	PEM	Reminder 7.5 Tax due 1 yr Reminder 7.5 Tax due 6 months Reminder 7.5 Tax due 3 months Tax 7.5 due 2 mos. Reminder 7.5 Tax due 1 month Tax 7.5	09-Aug-2005 09-Feb-2006 09-May-2006 09-Jun-2006 09-Jul-2006 09-Aug-2006
	Owner: AMBIN					
	Abstract: The ball lift device includes an improved track structure for stabilizing a bowling ball along a path of travel or guide path as it is lifted within the device. The device includes a means for lifting the ball by use of a pair of rotating V wheels and a drive means which rotates the V wheels through a drive belt which is driven by a motor. The V wheels are housed within a frame which has an entrance point for receiving the bowling ball to be lifted, and an exit point which ejects the bowling ball at a specified height. A guide support or single track structure defines the path of travel in which the ball is lifted through the device. The guide support includes a guide support bracket and a wear strip mounted over the bracket. A pair of side wear strips extend along the path of travel and are positioned so as to laterally stabilize the bowling ball as it is lifted along the guide support. The method of lifting includes the steps of providing a lifting device, introducing the ball into the lifting device along a path of travel, contacting the ball with a guide support assembly along a center line of the path of travel, and lifting the ball wherein the ball maintains contact against the guide support along the center line and is stabilized with at least one side wear strip.					
					Reminder 11.5 Tax due 1 yr. Reminder 11.5 Tax due 6 months Reminder 11.5 Tax due 3 months	09-Aug-2009 09-Feb-2010 09-May-2010
					Tax 11.5 due 2 mos. Reminder 11.5 Tax due 1 month Tax 11.5 Patent Expires 1 Year	09-Jun-2010 09-Jul-2010 09-Aug-2010 03-Feb-2017
					Patent Expires 6 Months Patent Expires 3 Months Patent Expires 2 Months Patent Expires 1 Month	03-Aug-2017 03-Nov-2017 03-Dec-2017 03-Jan-2018
					Patent Expires	03-Feb-2018

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SHEET METAL PIN TABLE AND RESPOT ACTUATOR United States of America Client Ref No: 2020594-3065	70003065 Granted Owner: AMBIN Abstract: A pin table for a bowling pin spotting/respotting device is fabricated from stamped sheet metal and has lips around the periphery of the sheet metal pin table, as well as around each of a plurality of pin openings through the pin table. The sheet metal pin table is generally planar in configuration and has a plurality of pin openings. The lips extend upwardly around the periphery of the pin table and around the periphery of each of the openings. The lips provide sufficient rigidity to the pin table to enable its manufacture from stamped sheet metal rather than a more expensive aluminum casting. A respot actuating assembly for use with the aforementioned table includes a respot cam link mechanism, a pair of crank arms and an adjustable stop mechanism for limiting rotation of the crank arms. Linkage connects the crank arms to the respot cam link mechanism and to multiple pairs of gripper rods for gripping and releasing a plurality of bowling pins.	01 08/873,566 12-Jun-1997	5,876,290 02-Mar-1999	PEM Reminder 7.5 Tax due 1 yr Reminder 7.5 Tax due 6 months Reminder 7.5 Tax due 3 months Tax 7.5 due 2 mos. Reminder 7.5 Tax due 1 month Tax 7.5 Reminder 11.5 Tax due 1 yr. Reminder 11.5 Tax due 6 months Reminder 11.5 Tax due 3 months Tax 11.5 due 2 mos. Reminder 11.5 Tax due 1 month Tax 11.5 Patent Expires 1 Year Patent Expires 6 Months Patent Expires 3 Months Patent Expires 2 Months Patent Expires 1 Month Patent Expires Patent Expires 1 Year Patent Expires 6 Months Patent Expires 3 Months Patent Expires 2 Months Patent Expires 1 Month Patent Expires	02-Sep-2005 02-Mar-2006 02-Jun-2006 02-Jul-2006 02-Aug-2006 02-Sep-2006 02-Sep-2009 02-Mar-2010 02-Jun-2010 02-Jul-2010 02-Aug-2010 02-Sep-2010 12-Jun-2016 12-Dec-2016 12-Mar-2017 12-Apr-2017 12-May-2017 12-Jun-2017 22-Feb-2008 22-Aug-2008 22-Nov-2008 22-Dec-2008 22-Jan-2009 22-Feb-2009
BOWLING ALLEY BUMPER SYSTEM United States of America Client Ref No: 2020594-3072	70003072 Granted Owner: AMBIN Abstract: A bowling alley bumper system in which an elongated bumper is mounted alongside and parallel to each alley gutter, and in which there are provided movable supports that permit the extension of the bumpers to guard the gutters when guarding is desired and retraction of the bumpers to expose the gutters when normal	01 313,710 22-Feb-1989	4,900,024 13-Feb-1990	PEM Patent Expires 1 Year Patent Expires 6 Months Patent Expires 3 Months Patent Expires 2 Months Patent Expires 1 Month Patent Expires Patent Expires 1 Year Patent Expires 6 Months Patent Expires 3 Months Patent Expires 2 Months Patent Expires 1 Month Patent Expires	12-Dec-2016 12-Mar-2017 12-Apr-2017 12-May-2017 12-Jun-2017 22-Feb-2008 22-Aug-2008 22-Nov-2008 22-Dec-2008 22-Jan-2009 22-Feb-2009

PATENT

REEL: 015209 FRAME: 0399

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Title	Case Number Status	Application	Patent No.	Attorney(s) Next Actions(s)	Due (Date(s))
BOWLING ALLEY BUMPER SYSTEM United States of America Client Ref No: 2020594-3074	70003074 Granted Owner: AMBIN Abstract: Bumper bowling systems include retractable bumpers and mechanisms connected to the retractable bumpers disposed alongside a bowling alley's gutters. The mechanisms are adapted to extend the bumpers into a position which prevent bowling balls from falling into the gutter and also to retract the bumpers to permit ordinary bowling. A segmented longitudinally extending cap and a structural support member are also provided so that the cap covers the bumper mechanism.	02 920,520 28-Jul-1992	5,405,295 11-Apr-1995	PEM Reminder 11.5 Tax due 1 yr Reminder 11.5 Tax due 6 months Reminder 11.5 Tax due 3 months Tax 11.5 due 2 mos. Reminder 11.5 Tax due 1 month Tax 11.5	11-Oct-2005 11-Apr-2006 11-Jul-2006 11-Aug-2006 11-Sep-2006 11-Oct-2006 11-Apr-2011 11-Oct-2011 11-Jan-2012
MOLDED DISTRIBUTOR RECEIVER AND PIN STORAGE MAGAZINE United States of America Client Ref No: 2020594-3075	70003075 Granted Owner: AMBIN Abstract: A bowling pin storage device includes a one piece three dimensional molded magazine or bin having a plurality of elongated pockets for storing bowling pins in an essentially horizontal plane above a pin spotter. Each of the elongated cavities define a bowling pin shaped opening in the bottom thereof and include a shoulder portion for supporting the head of a bowling pin. The device also includes a plurality of movable wing like support elements for supporting the base or lower portion of bowling pins. The support elements hold or retain the pins within the storage bin when in a first position and when in a second position release the pins to fall downwardly to a pin spotting device.	01 292,181 19-Aug-1994	5,439,418 08-Aug-1995	PEM Reminder 11.5 Tax due 1 yr. Reminder 11.5 Tax due 6 months Reminder 11.5 Tax due 3 months Reminder 11.5 Tax due 1 month Tax 11.5 Patent Expires 1 Year Patent Expires 6 Months Patent Expires 3 Months Patent Expires 2 Months Patent Expires 1 Month Patent Expires Reminder 11.5 Tax due 1 yr. Reminder 11.5 Tax due 6 months Reminder 11.5 Tax due 3 months Reminder 11.5 Tax due 1 month Tax 11.5 Patent Expires 1 Year Patent Expires 6 Months Patent Expires 3 Months Patent Expires 2 Months Patent Expires 1 Month Patent Expires	08-Feb-2006 08-Aug-2006 08-Nov-2006 08-Jan-2007 08-Feb-2007 19-Aug-2013 19-Feb-2014 19-May-2014 19-Jun-2014 19-Jul-2014 19-Aug-2014

Exhibit A-1 to Patent and Trademark Assignment

AMF Bowling Products, Inc. (formerly known as AMF Bowling, Inc.)

US Patents

Wednesday, February 11, 2004

Client: AMF B

AMF Bowling Worldwide, Inc.

Client Status Report

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Title	Status	Attorney(s)			Next Actions(s)	Due (Date(s))
T-SHAPED FOUL LINE CONSTRUCTION JOINING LANE SECTIONS	70003093 Granted	01	253,082	5,466,193	PEM Reminder 11.5 Tax due 1 yr. Reminder 11.5 Tax due 6 months	14-May-2006 14-Nov-2006
	United States of America Client Ref No: 2020594-3093	Owner: AMBIN Abstract: A bowling alley construction includes an approach section, a lane section and a foul line coupling between the approach and lane sections. The foul line has an elongated relatively flat base portion and an upwardly and transversely extending riser which extends across the width of the lane and/or approach section. A synthetic panel abuts one side of the riser and is fastened to one section of the alley through the base portion of the foul line coupling. A method for resurfacing bowling alleys with a synthetic panel and an L or T-shaped foul line coupling is also disclosed. In that method, a proximal end of the synthetic panel is then fastened to one section of the alley and to the base portion of the foul line coupling.			Reminder 11.5 Tax due 3 months Tax 11.5 due 2 mos. Reminder 11.5 Tax due 1 month Reminder 11.5 Tax due 1 month Tax 11.5 Patent Expires 1 Year Patent Expires 6 Months Patent Expires 3 Months Patent Expires 2 Months Patent Expires 1 Month Patent Expires	14-Feb-2007 14-Mar-2007 14-Apr-2007 14-Apr-2007 14-May-2007 02-Jun-2013 02-Dec-2013 02-Mar-2014 02-Apr-2014 02-May-2014 02-Jun-2014

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AMF Bowling Products, Inc.

US Patents

Client: <u>AMF B</u>		<u>AMF Bowling Worldwide, Inc.</u>							
Title	Case Number Status	Application	Patent No.	Attorney(s)	Next Actions(s)	Due (Date(s))			
<u>MOTORIZED BOWLING BALL RETURN MECHANISM WITH CLOSED LOOP FEEDBACK</u> United States of America Client Ref No: 2020594-3070	000340	60/348,441		PEM					
		TRANS	14-Jan-2002						
<u>BOWLING SCORING DISPLAY SYSTEM</u> United States of America Client Ref No: 2020594-3000	70003000	03 07/155,658	4,887,813	PEM	Patent Expires 1 Year	19-Dec-2005			
	Granted	21-Jan-1988	19-Dec-1989		Patent Expires 6 Months	19-Jun-2006			
	Owner: AMBPI Abstract: A bowling scoring display in which the score of a bowling game may be displayed in a selected one of a plurality of different display formats. As example, the number of bowlers whose scores are displayed may be changed, and the number of frames of a bowling game that are displayed may be changed. As a general rule, the few the number of players and/or frames that are displayed, the larger the alpha-numeric characters used in the display.				Patent Expires 3 Months	19-Sep-2006			
					Patent Expires 2 Months	19-Oct-2006			
					Patent Expires 1 Month	19-Nov-2006			
					Patent Expires	19-Dec-2006			
<u>TABLE</u> United States of America Client Ref No: 2020594-3005	70003005	01 29/090,260	D412,415	PEM	Patent Expires 1 Year	03-Aug-2012			
	Granted	02-Jul-1998	03-Aug-1999		Patent Expires 6 Months	03-Feb-2013			
	Owner: AMBPI				Patent Expires 3 Months	03-May-2013			
					Patent Expires 2 Months	03-Jun-2013			
					Patent Expires 1 Month	03-Jul-2013			
					Patent Expires	03-Aug-2013			

Exhibit A-1 to Patent and Trademark Assignment

AMF Bowling Products, Inc.

US Patents

Wednesday, February 11, 2004

Client: AMF B

AMF Bowling Worldwide, Inc.

Client Ref No: 2020594-3008

United States of America

Title	Case Number	Status	Application	Patent No.	Attorney(s)	Next Actions(s)	Due (Date(s))
BALL RETURN AND STORAGE RACK	70003008	Granted	01 29/090,258	D416,600	PEM	Patent Expires 1 Year	16-Nov-2012
			02-Jul-1998	16-Nov-1999		Patent Expires 6 Months	16-May-2013
		Owner: AMBPI				Patent Expires 3 Months	16-Aug-2013
						Patent Expires 2 Months	16-Sep-2013
						Patent Expires 1 Month	16-Oct-2013
						Patent Expires	16-Nov-2013

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AMF Bowling Products, Inc.

US Patents

Wednesday, February 11, 2004

Client: AMF B AMF Bowling Worldwide, Inc.

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Title	Case Number Status	Application	Patent No.	Attorney(s) Next Actions(s)	Due (Date(s))
AUTOMATIC VACUUM BOWLING LANE STRIPPER United States of America	70003033 Granted Owner: AMBPI	01 07/371,295 26-Jun-1989	4,920,604 01-May-1990	Patent Expires 1 Year Patent Expires 6 Months Patent Expires 3 Months Patent Expires 2 Months Patent Expires 1 Month Patent Expires	26-Jun-2008 26-Dec-2008 26-Mar-2009 26-Apr-2009 26-May-2009 26-Jun-2009

Abstract: In accordance with the present invention, an apparatus is provided wherein cleaner is applied to all or a portion of the lane and the cleaner, oil and other residue is picked up by a vacuum head trailing the cleaner applicator in one trip from the foul line to the pit leaving the lane clean and dry. If desired, the cleaning operation can be limited to the last forty-five feet or so, since it is generally desirable to clean this portion of the lane more often than the front portion. On the return or reverse movement of the stripper, no cleaning operations are undertaken but cleaner may be permitted to flow from the cleaner storage tank to the applicator so that the applicator will have sufficient cleaner in it for the beginning of application on the next lane. Means is provided for bowing the vacuum head so that the center is lower than the side edges so that it conforms generally to the concave shape of a bowling alley. A waste tank is provided with appropriate baffles to separate the waste liquid and solids from an air stream created by a vacuum motor attached to the outlet of the waste tank.

Exhibit A-1 to Patent and Trademark Assignment

AMF Bowling Products, Inc.

US Patents

Wednesday, February 11, 2004

Client: AMF B AMF Bowling Worldwide, Inc.

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Title	Case Number Status	Application	Patent No.	Attorney(s) Next Actions(s)	Due (Date(s))
AUTOMATIC VACUUM BOWLING LANE STRIPPER United States of America	70003033 Granted Owner: AMBPI	02 453,763 20-Dec-1989	4,962,565 16-Oct-1990	Patent Expires 1 Year Patent Expires 6 Months Patent Expires 3 Months Patent Expires 2 Months Patent Expires 1 Month Patent Expires	26-Jun-2008 26-Dec-2008 26-Mar-2009 26-Apr-2009 26-May-2009 26-Jun-2009

Abstract: In accordance with the present invention, an apparatus is provided wherein cleaner is applied to all or a portion of the lane and the cleaner, oil and other residue is picked up by a vacuum head trailing the cleaner applicator in one trip from the foul line to the pit leaving the lane clean and dry. If desired, the cleaning operation can be limited to the last forty-five feet or so, since it is generally desirable to clean this portion of the lane more often than the front portion. On the return or reverse movement of the stripper, no cleaning operations are undertaken but cleaner may be permitted to flow from the cleaner storage tank to the applicator so that the applicator will have sufficient cleaner in it for the beginning of application on the next lane. Means is provided for bowing the vacuum head so that the center is lower than the side edges so that it conforms generally to the concave shape of a bowling alley. A waste tank is provided with appropriate baffles to separate the waste liquid and solids from an air stream created by a vacuum motor attached to the outlet of the waste tank.

Remarks matter 3035

Exhibit A-1 to Patent and Trademark Assignment

AMF Bowling Products, Inc.

US Patents

Wednesday, February 11, 2004

Client: **AMF B** **AMF Bowling Worldwide, Inc.**

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Title	Case Number Status	Application	Patent No.	Attorney(s)	Next Actions(s)	Due (Date(s))
COMBINATION BOWLING LANE STRIPPER AND DRESSING APPARATUS	70003034 Granted	02 07/509,243 16-Apr-1990	4,959,884 02-Oct-1990	PEM	Patent Expires 1 Year Patent Expires 6 Months	29-Jun-2008 29-Dec-2008
United States of America Client Ref No: 2020594-3030	Owner: AMBPI Abstract: In accordance with the present invention, a combination apparatus is provided wherein cleaner is applied to all or a portion of the lane and the cleaner, dressing and other residue is				Patent Expires 3 Months Patent Expires 2 Months Patent Expires 1 Month Patent Expires 1 Month Patent Expires	29-Mar-2009 29-Apr-2009 29-May-2009 29-May-2009 29-Jun-2009

A BOWLING LANE SYSTEM WITH
LIGHT EMITTING ELEMENTS

United States of America

Client Ref No: 2020594-3069

70003069
TRANS

Owner: AMBPI

09/591,345
09-Jun-2000

MDB
PEM

Remarks THIS PATENT APPLICATION IS FOR MONITORING ONLY!! JOHN ALISON AT FINNEGAN AND HENDERSON IS HANDLING THIS UTILITY PATENT APPLICATION AND THE RELATED PCT PATENT APPLICATION.

PATENT

REEL: 015209 FRAME: 0407

Exhibit A-1 to Patent and Trademark Assignment

AMF Bowling Products, Inc.

US Patents

Wednesday, February 11, 2004

Client: **AMF B**

AMF Bowling Worldwide, Inc.

Client Status Report

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Title	Case Number Status	Application	Patent No.	Attorney(s) Next Actions(s)	Due (Date(s))
BOWLING LANE VACUUM WITH FLOATING HEAD United States of America	70009071 Granted Owner: AMBPI	01 07/274,448 21-Nov-1988	4,856,138 15-Aug-1989	Patent Expires 1 Year Patent Expires 6 Months Patent Expires 3 Months Patent Expires 2 Months Patent Expires 1 Month Patent Expires	21-Nov-2007 21-May-2008 21-Aug-2008 21-Sep-2008 21-Oct-2008 21-Nov-2008

Client Ref No: 2020594-9071

Abstract: An improved bowling lane stripping apparatus is disclosed of the type wherein the squeegee-equipped pickup head whose function it is to wipe the alley free of dirt-laden solvent is pivotally connected to the carriage carrying the power unit such that this head is free to raise up without gouging the lane surface as the carriage support wheels roll down the ramps leading into the gutters alongside the lane thereby causing the unit to tip forwardly. As a further improvement, the pickup head is so weighted and displaced forwardly of its pivotal connection to the carriage a distance chosen to cooperate with the weighted head and define a cantilevered mounting capable of maintaining the squeegee carried thereby in continuous wiping contact with the lane surface that thus becomes effective to remove even puddles and pools of liquid left in depressed areas of the latter.

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