

HARRIS & HARRIS GROUP INC /NY/  
Form 40-APP  
April 29, 2009

U.S. SECURITIES AND EXCHANGE COMMISSION  
Washington, D.C. 20549

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APPLICATION FOR A CERTIFICATION PURSUANT TO SECTION 851(e) OF THE  
INTERNAL REVENUE CODE OF 1986, AS AMENDED.

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HARRIS & HARRIS GROUP, INC.

111 West 57th Street  
Suite 1100  
New York, NY 10019

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All Communications, Notices, and Orders to:  
Daniel B. Wolfe, President and Chief Operating Officer  
Harris & Harris Group, Inc.  
111 West 57th Street  
Suite 1100  
New York, NY 10019

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Copy to:

Steven B. Boehm, Esq.  
Sutherland Asbill & Brennan LLP  
1275 Pennsylvania Avenue, N.W.  
Washington, D.C. 20004-2415

Sandra M. Forman, Esq.  
General Counsel  
Harris & Harris Group, Inc.  
111 West 57th Street  
Suite 1100  
New York, NY 10019

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April 29, 2009

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UNITED STATES OF AMERICA  
BEFORE THE  
SECURITIES AND EXCHANGE COMMISSION

In the Matter of:

Harris & Harris Group, Inc.

111 West 57th Street  
Suite 1100  
New York, NY 10019

APPLICATION FOR A CERTIFICATION  
PURSUANT TO SECTION  
851(e) OF THE INTERNAL REVENUE  
CODE OF 1986, AS AMENDED.

INTRODUCTION

Harris & Harris Group, Inc. (“Applicant”) hereby applies to the Securities and Exchange Commission (the “Commission”), pursuant to Section 851(e) of the Internal Revenue Code of 1986, as amended (the “Code”), for a certification that Applicant is principally engaged in the furnishing of capital to other corporations which are principally engaged in the development or exploitation of inventions, technological improvements, new processes, or products not previously generally available.

Applicant proposes to qualify as a “regulated investment company” under Section 851(a) of the Code for the fiscal year ended December 31, 2008. The certification being sought is a prerequisite to qualification, pursuant to the provisions of Section 851(e) of the Code, as a regulated investment company under Section 851(a).

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I. GENERAL DESCRIPTION OF APPLICANT

Applicant was incorporated under the laws of the State of New York in August 1981 and operates as an internally managed business development company. Applicant's securities were first registered with the Commission pursuant to Section 12 of the Securities Exchange Act of 1934, as amended, in 1982. In 1992, Applicant registered with the Commission as a closed-end, non-diversified management investment company under the Investment Company Act of 1940, as amended (the "1940 Act"). On July 26, 1995, Applicant elected to become regulated as a business development company ("BDC") pursuant to Section 54(a) of the 1940 Act (the "BDC election").

Applicant's investment portfolio consists primarily of equity investments in early stage companies that are principally engaged in the development, commercialization and integration of products enabled by nanotechnology and microsystems that are applied in industries such as computer software and hardware, telecommunications, medical devices, pharmaceuticals, biotechnology, electronics, semiconductors and advanced materials. Many of Applicant's portfolio companies are privately held, thinly capitalized, unproven companies with no operating history. As of December 31, 2008, Applicant had total assets of approximately \$111.6 million.

The Commission has previously issued certifications pursuant to Section 851(e) of the Code that Applicant was, for the fiscal years ended December 31, 1997 and December 31, 1999 through December 31, 2007, principally engaged in the furnishing of capital to other corporations which are principally engaged in the development or exploitation of inventions, technological improvements, new processes, or products not previously generally available.<sup>1</sup>

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<sup>1</sup> Harris & Harris Group, Inc., Investment Company Act Release Nos. 28294 (May 30, 2008); 27870 (June 20, 2007); 27398 (June 16, 2006); 26908 (June 15, 2005); 26467 (June 15, 2004); 25990 (Apr. 2, 2003); 25454 (Mar. 7, 2002); 24888 (Mar. 8, 2001); 24314 (Feb. 24, 2000); 23102 (Apr. 6, 1998).

## II. LEGAL ANALYSIS

### A. Applicable Law

Section 851 of the Code sets forth the general requirements a corporation must satisfy in order to qualify for treatment as a regulated investment company under Subchapter M of the Code (a “RIC”). A RIC is defined in Section 851(a) as “any domestic corporation . . . which, at all times during the taxable year . . . is registered under the . . . [1940 Act] as a management company or unit investment trust or . . . has in effect an election under such Act to be treated as a business development company.” Section 851 also imposes certain conditions and limitations upon entities seeking to qualify as RICs. Section 851(b)(3)(A) provides that an investment company or BDC seeking to qualify for treatment as a RIC must, as of the close of each quarter of the taxable year, have at least 50 percent of the value of its total assets represented by

cash and cash items (including receivables), Government securities and securities of other regulated investment companies, and . . . other securities for purposes of this calculation limited, except and to the extent provided in subsection [851](e), in respect of any one issuer to an amount not greater in value than 5 percent of the value of the total assets of the taxpayer and to not more than 10 percent of the outstanding voting securities of such issuer . . . .

The 1940 Act generally imposes no similar diversification requirements.

Section 851(e) provides an exemption from the diversification requirements of Subchapter M for certain investment companies furnishing capital to certain development corporations. In pertinent part, Section 851(e) provides that

[i]f the . . . Commission determines, in accordance with regulations issued by it, and certifies to the Secretary not earlier than 60 days prior to the close of the taxable year of a management company or a business development company . . . that such investment company is principally engaged in the furnishing of capital to other corporations which are principally engaged in the development or exploitation of inventions, technological developments, new processes, or products not previously generally available, such investment company may, in the computation of 50 percent of the value of its assets under subparagraph (A) of subsection (b)(3) for any quarter of such taxable year, include the value of any securities of an issuer, whether or not the investment company owns more than 10 percent of the outstanding voting securities of such issuer, the basis of which, when added to the basis of the investment company for securities of such issuer previously acquired, did not exceed 5 percent of the value of the total assets of the investment company at the time of the subsequent acquisition of securities.

B. Need for Relief

Applicant's board of directors has determined that it would be in the best interests of Applicant and its shareholders for Applicant to qualify for treatment as a RIC for the fiscal year ended December 31, 2008. Since its BDC election, Applicant has invested a substantial percentage of its total assets in early stage development, or start-up, companies (the portfolio companies are more fully described below) in a broad range of industry segments that are primarily engaged in the development, commercialization and integration of products enabled by nanotechnology and microsystems that are applied in industries such as computer software and hardware, telecommunications, medical devices, pharmaceuticals, biotechnology, electronics, semiconductors and advanced materials (each a "Portfolio Company" and together the "Portfolio Companies"). Given the inherent nature of start-up and early stage development companies, many of the Portfolio Companies are thinly capitalized, unproven companies that lack management depth and have no operating history. As a consequence, Applicant, in addition to providing capital to the Portfolio Companies, may also assist with the development of financial plans for the companies, recruiting and hiring management, as well as providing management expertise. Given Applicant's level of involvement in many of the Portfolio Companies, Applicant may, from time to time, own a majority of the equity securities of a given Portfolio Company. Thus, without the relief requested, Applicant may be unable to satisfy the requirements of Section 851(b)(3)(A). This result would have a deleterious impact on Applicant's shareholders by reducing Applicant's income without achieving any concomitant policy objective.

1. Investment Portfolio

As stated above, Applicant has invested a substantial portion of its assets in early stage companies primarily engaged in the development, commercialization and integration of products enabled by nanotechnology and microsystems that are applied in industries such as computer software and hardware, telecommunications, medical devices, pharmaceuticals, biotechnology, electronics, semiconductors and advanced materials. Applicant believes that most of those companies satisfy the requirements of section 851(e) of the Code. In reaching this conclusion, the Applicant generally has relied upon information provided by the Portfolio Companies themselves and others, including but not limited to, offering circulars, prospectuses, analyst reports, internal company memoranda, patent applications and similar documents. In addition, Applicant generally is represented on the boards of directors of the Portfolio Companies through member or observer status and also has direct access to senior management of those companies through contractual information rights.

The following table shows the composition of Applicant's total assets as of the end of each calendar quarter of 2008:

|   | 3/31/2008      | 6/30/2008      | 9/30/2008      | 12/31/2008     |
|---|----------------|----------------|----------------|----------------|
| A. Investments in "eligible portfolio companies" described in Section 2(a)(46) of the 1940 Act and believed by the Applicant to be engaged in the business activities required by Section 851(e) of the Code    | \$ 80,202,336  | \$ 89,414,431  | \$ 60,663,002  | \$ 54,125,622  |
| B. Investments in "eligible portfolio companies" described in Section 2(a)(46) of the 1940 Act and treated by Applicant as not engaged in the business activities required by Section 851(e) of the Code*       | 2,219          | 2,219          | 2,219          | 2,219          |
| C. Investments that do not qualify under Section 55(a) of the 1940 Act, but as to which the issuers are believed by Applicant to be engaged in the business activities required by Section 851(e) of the Code** | 2,893,308      | 2,918,874      | 3,277,224      | 2,837,312      |
| D. Investments that do not qualify under Section 55(a) of the 1940 Act and treated by Applicant as not covered by Section 851(e) of the Code  | -              | -              | -              | -              |
| E. Cash, cash items and securities as set forth in Section 55(a)(6) of the 1940 Act, collectively "Cash Equivalents"  | 53,799,254     | 62,113,144     | 57,970,695     | 53,676,249     |
| Total Investments and Cash Equivalents  | \$ 136,897,117 | \$ 154,448,668 | \$ 121,913,140 | \$ 110,641,402 |
| Other Assets  | 3,875,522      | 1,338,315      | 1,163,360      | 986,199        |
| Total Assets  | \$ 140,772,639 | \$ 155,786,983 | \$ 123,076,500 | \$ 111,627,601 |

\* As of December 31, 2008, the sole investment in this category was Exponential Business Development Company.

\*\* As of December 31, 2008, the sole investment in this category was D-Wave Systems Inc.

As demonstrated above, as of December 31, 2008, 96.57% of Applicant's total assets consisted of assets of the type set forth in paragraphs 1 through 6 of Section 55(a) of the 1940 Act. Such assets comprise 97.43% of Applicant's invested assets.

2. Portfolio Companies

As reflected in the table above, companies engaged in the type and degree of business activities described in Section 851(e) of the Code, excluding the investments in issuers described in Categories B. and D. above, ("Development Companies") comprised the following percentages of the total assets less Cash Equivalents of Applicant at the end of each of the calendar quarters of 2008: March 31, 95.52%; June 30, 98.57%; September 30, 98.21%; and December 31, 98.29%. The Development Companies are discussed below. Unless otherwise indicated below, information is provided as of December 31, 2008.

Adesto Technologies Corporation ("Adesto")(Category A) -- Adesto develops semiconductor-related products enabled at the nanoscale. The company's technology addresses several problems that limit the capabilities of certain traditional electronic components including the ability to scale the devices as standard chip dimensions shrink, the ability to increase speed of operation and the ability to decrease power consumption.

Percentage of Equity held by Applicant<sup>2</sup> -- 13.97%

Investment Value/Percentage of Applicant's Total Assets -- \$1,100,000 / 1.0%

Date of Initial Investment -- February 20, 2007

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<sup>2</sup> Percentage of Equity for all portfolio companies held by Applicant is reported on voting equity basis.



Ancora Pharmaceuticals Inc. (“Ancora”)(Category A) -- Ancora develops synthetic carbohydrates for pharmaceutical markets and for internal drug development programs. Ancora’s scalable technology enables rapid milligram to kilogram production of synthetic carbohydrates for use in drug discovery and industrial applications.

Percentage of Equity held by Applicant -- 22.42%

Investment Value/Percentage of Applicant’s Total Assets -- \$1,200,000 / 1.1%

Date of Initial Investment -- May 3, 2007

BioVex Group Inc. (“BioVex”)(Category A) -- BioVex develops novel biologics for treatment of cancer and infectious diseases. BioVex is a Phase II/III clinical-stage company built on oncolytic virus technology that replicates and spreads within solid tumors, causing the death of cancer cells, accompanied by the induction of a systemic immune response.

Percentage of Equity held by Applicant -- 3.99%

Investment Value/Percentage of Applicant’s Total Assets -- \$263,972 / less than 1%

Date of Initial Investment -- September 27, 2007

BridgeLux, Inc. (“BridgeLux”)(Category A) -- BridgeLux develops chips for high-power, indium gallium nitride light emitting diodes that are used in various solid state lighting, mobile appliance, signage and automotive applications. BridgeLux technology permits a highly reliable epitaxy structure and a robust chip design that are necessary for the requirement of long lumen maintenance under severe operating conditions such as high current density and high thermal stress that adversely affect most high-power devices.

Percentage of Equity held by Applicant -- 6.35%

Investment Value /Percentage of Applicant's Total Assets -- \$3,595,443 / 3.22%

Date of Initial Investment -- May 20, 2005

Cambrios Technology Corp. ("Cambrios")(Category A) -- Cambrios develops materials that can be deposited from solution onto any substrate to create flexible, transparent conductive surfaces. Metallic nanowires are used as the conductive medium because they minimize the absorption and scattering of visible light.

Percentage of Equity held by Applicant -- 6.44%

Investment Value/Percentage of Applicant's Total Assets -- \$1,297,013 / 1.16%

Date of Initial Investment -- November 9, 2004

CFX Battery, Inc. ("CFX")(Category A) – CFX, formerly Lifco, Inc., is developing primary and rechargeable batteries using a novel variation of existing battery chemistry that is enabled by nanotechnology. The company hopes to use its proprietary nanotechnology to deliver low-cost batteries with superior performance, safety and weight. On February 28, 2008, Lifco merged with CFX Battery, Inc., to form CFX Battery, Inc.

Percentage of Equity held by Applicant -- 9.97%

Investment Value/Percentage of Applicant's Total Assets -- \$1,473,264 / 1.32%

Date of Initial Investment -- June 21, 2007

Cobalt Technologies, Inc. ("Cobalt") (Category A) -- Cobalt is developing biobutanol, a next-generation biofuel. Cobalt's proprietary technologies in microbial physiology, strain development, fermentation and low-energy fuel separation enable it to produce a new generation of fuels that burn cleaner, are more cost-effective, and enhance environmental sustainability. By optimizing productivity, titer and yield, it is seeking to make biobutanol an affordable gasoline substitute that can meet the immediate needs of the transportation industry.

Percentage of Equity held by Applicant -- 1.15%

Investment Value /Percentage of Applicant's Total Assets -- \$187,500 / less than 1%

Date of Initial Investment -- October 7, 2008

Crystal IS, Inc. ("Crystal IS")(Category A) -- Crystal IS is commercializing patented technology for the production of single-crystal aluminum nitride substrates for the cost-effective production of high power, high temperature, and compound semiconductor devices. The nitride semiconductor industry provides devices that are used in stoplights, high-storage capacity DVDs, military applications, biotechnology, information technology, wireless communication, lighting, and high-power microwave devices.

Percentage of Equity held by Applicant -- 6.84%

Investment Value /Percentage of Applicant's Total Assets -- \$332,238 / less than 1%

Date of Initial Investment -- September 21, 2004

CSwitch Corporation (“CSwitch”)(Category A) -- CSwitch develops next-generation system-on-a-chip technology solutions for a wide range of communication based platforms. The company's first product will be a configurable switch array chip that offers the performance of an application-specific integrated circuit and the development cost and time-to-market of a field-programmable gate array.

Percentage of Equity held by Applicant -- 7.24%

Investment Value /Percentage of Applicant’s Total Assets -- \$118,624 / less than 1%

Date of Initial Investment -- May 27, 2004

D-Wave Systems, Inc. (“D-Wave”)(Category C) -- D-Wave develops high-performance quantum computing systems for commercial use in logistics, bioinformatics, life and physical sciences, quantitative finance and electronic design automation.

Percentage of Equity held by Applicant -- 3.11%

Investment Value /Percentage of Applicant’s Total Assets -- \$2,837,312 / 2.54%

Date of Initial Investment -- April 19, 2006

Ensemble Discovery Corporation (“Ensemble”)(Category A) -- Ensemble develops DNA Programmed Chemistry (“DPC”) for the discovery of new classes of therapeutics and bioassays. DPC provides unprecedented control of chemical reactivity, enabling the synthesis of diverse libraries of compounds for use in drug discovery and biodetection.

Percentage of Equity held by Applicant -- 5.34%

Investment Value/Percentage of Applicant’s Total Assets -- \$1,256,375 / 1.13%

Date of Initial Investment -- June 6, 2007

Innovalight, Inc. (“Innovalight”)(Category A) -- Innovalight develops renewable energy products based on silicon nanotechnology. The silicon nanoparticles are synthesized using a single-step, continuous-flow, scaleable, non-thermal plasma process. The resulting stable and non-reactive nanoparticles permit tunable light absorption and emission and an increase in the quantum efficiencies of solar devices.

Percentage of Equity held by Applicant -- 11.68%

Investment Value /Percentage of Applicant’s Total Assets -- \$5,783,838 / 5.18%

Date of Initial Investment -- April 20, 2006

Kereos, Inc. (“Kereos”)(Category A) -- Kereos develops targeted therapeutics and molecular imaging agents that detect and attack cancer and cardiovascular disease. Kereos’ targeted therapeutics seek out definitive disease biomarkers and carry powerful payloads of chemotherapeutics. The imaging agents and targeted therapeutics are based on a proprietary ligand-targeted emulsion technology consisting of a perfluorocarbon core surrounded by a lipid monolayer.

Percentage of Equity held by Applicant -- 2.13%

Investment Value /Percentage of Applicant’s Total Assets -- \$0 / 0%

Date of Initial Investment -- May 19, 2005

Kovio, Inc. (“Kovio”)(Category A) -- Kovio is developing a new category of semiconductor products using printed electronics and thin film technologies. Printed electronics enables fabrication of semiconductor devices over large areas, on flexible substrates, and at a fraction of the cost of conventional silicon technology. The initial target applications are ultra-low cost RFID for the retail industry, transit tickets, library inventory control, asset management, manufacturing, and logistics.

Percentage of Equity held by Applicant -- 6.32%

Investment Value /Percentage of Applicant's Total Assets -- \$4,863,503 / 4.36%

Date of Initial Investment -- November 4, 2005

Laser Light Engines, Inc. ("LLE") (Category A) -- LLE seeks to manufacture solid-state light sources for digital cinema and large-venue projection display. The company designs, develops and manufactures ultra-high brightness, digitally controlled laser-driven light sources for demanding illumination applications. LLE uniquely combines laser technology, non-linear optics, specialty optical fiber, digital control and applications knowledge to produce its laser-driven light engines.

Percentage of Equity held by Applicant -- 26.76%

Investment Value /Percentage of Applicant's Total Assets -- \$2,000,000 / 1.79%

Date of Initial Investment -- May 6, 2008

Mersana Therapeutics, Inc. ("Mersana")(Category A) -- Mersana is a pharmaceutical company founded to develop advanced drug delivery systems. Mersana utilizes patented technology to provide fully biodegradable, nanoscopic drug delivery vehicles based on proprietary molecular constructs and "biological stealth" materials. Mersana's proprietary materials and molecular constructs are essentially "biomimetic." Mersana utilizes mechanisms employed by the biological interface and the nutrient transport systems to transport drugs and circumvent host defense mechanisms.

Percentage of Equity held by Applicant -- 8.48%

Investment Value /Percentage of Applicant's Total Assets -- \$1,176,779 / 1.05%

Date of Initial Investment -- February 12, 2002

Metabolon, Inc. ("Metabolon")(Category A) -- Metabolon uses a proprietary technology platform in metabolomics to map changes in metabolic pathways for the identification of biomarkers and the early diagnosis of disease states. Metabolomics is the study of the repertoire of non-proteinaceous, endogenously-synthesized small molecules present in an organism. Metabolon uses mass-spectrometry based technologies, data integration and propriety software to discover biomarkers.

Percentage of Equity held by Applicant -- 13.77%

Investment Value /Percentage of Applicant's Total Assets -- \$1,363,266 / 1.22%

Date of Initial Investment -- January 11, 2006

Molecular Imprints, Inc. ("Molecular")(Category A) -- Molecular provides nanoimprint-based lithography technology and systems for manufacturing nano scale features useful in hard disk drives, optical components and semiconductor devices.

Percentage of Equity held by Applicant -- 3.90%

Investment Value /Percentage of Applicant's Total Assets -- \$2,134,583 / 1.91%

Date of Initial Investment -- March 31, 2004

Nanogram Corporation (“Nanogram”)(Category A) -- Nanogram uses its laser pyrolysis process technology to synthesize high-quality silicon nanoparticles. The company plans to use this technology to make high-efficiency, thin-film solar cells. Nanogram is a spin-off of NeoPhotonics Corporation.

Percentage of Equity held by Applicant -- 5.75%

Investment Value /Percentage of Applicant’s Total Assets -- \$1,471,805 / 1.32%

Date of Initial Investment -- April 30, 2003

Nanomix, Inc. (“Nanomix”)(Category A) -- Nanomix is developing nanoelectronic sensors that integrate carbon nanotube electronics with silicon microstructures. Nanomix has developed a scaleable, electronic detection platform based on the integration of proprietary carbon nanotube growth processes to fabricate NTFETs (nanotube field effect transistors) coupled with "recognition" layer chemistries and ultimately integrated with traditional Si-CMOS fabrication. This general platform is applicable to the detection of a large host of industrial gases, medical breath tests and biomolecular species.

Percentage of Equity held by Applicant -- 6.10%

Investment Value /Percentage of Applicant’s Total Assets -- \$30,050 / less than 1%

Date of Initial Investment -- December 20, 2004



Nanosys, Inc. (“Nanosys”)(Category A) -- Nanosys develops novel and patent-protected nanostructures that integrate functional complexity directly into each individual nanostructure. This capability enables the low cost fabrication of revolutionary high-value, high-performance applications in a broad range of industries including life sciences, physical sciences, information technology, communications, renewable energy and homeland security. The initial applications include color filters for light emitting diodes, material devices, large-area macroelectronic devices, memory and fuel cells.

Percentage of Equity held by Applicant -- 2.84%

Investment Value /Percentage of Applicant’s Total Assets -- \$5,370,116 / 4.81%

Date of Initial Investment -- April 7, 2003

Nantero, Inc. (“Nantero”)(Category A) -- Nantero is currently developing NRAMTM -- a high-density nonvolatile random access memory chip using patented nanotechnology. The NRAMTM design uses carbon nanotubes as the active memory elements, and Nantero is developing a straightforward way to manufacture the memory chip and integrate it with standard semiconductor processes. The potential applications for the nonvolatile memory Nantero is developing include instant-on computers, radiation-hardened memory and memory used in devices such as MP3 players, digital cameras, and PDAs.

Percentage of Equity held by Applicant -- 3.50%

Investment Value /Percentage of Applicant’s Total Assets -- \$2,246,409 / 2.01%

Date of Initial Investment -- August 10, 2001

NeoPhotonics Corporation (“NEO”) (Category A) -- NEO uses its patented nanomaterials deposition technology to enable the true integration of planar optical components, by developing and manufacturing planar optical devices and components for the leading optical component manufacturers. The company, a recognized leader in nanomaterials synthesis processes, has developed commercial production systems for planar deposition and optical materials integration. Its Laser Reactive Deposition (LRD™) technology is the only commercial manufacturing process capable of producing the full complement of active and passive glass materials used to produce optical amplifiers, waveguide lasers, and passive planar waveguides.

Percentage of Equity held by Applicant -- 2.46%

Investment Value /Percentage of Applicant’s Total Assets -- \$1,634,454 / 1.46%

Date of Initial Investment -- December 5, 2003

Nextreme Thermal Solutions, Inc. (“Nextreme”) (Category A) -- Nextreme aims to be a high-volume manufacturer of high-performance, thin-film, thermoelectric (“TE”) devices for both discrete and integrated cooling and power generation applications. A thermoelectric module is a semiconductor-based electronic component that functions as a small, solid-state heat pump. This cooling capability is ideally suited for applications where temperature stabilization, temperature cycling, or cooling below ambient temperatures are required. Applications of TE modules include cooling of microprocessors, power semiconductors, medical devices and optical communications devices as well as power generation by scavenging of waste heat.

Percentage of Equity held by Applicant --18.49%

Investment Value /Percentage of Applicant’s Total Assets -- \$2,202,629 / 1.97%

Date of Initial Investment -- December 7, 2004

Polatis, Inc. (“Polatis”) (Category A) -- Polatis, Inc., is focused on delivering tunable, low-cost photonic switch subsystems for the instrumentation and test market. These subsystems are enabled by the DirectLight platform, which is a proprietary, beam-steering methodology using solid-state mechanics for precision tuning of optics. Unique to DirectLight is the ability to provide highly integrated optical functions, including monitoring and attenuation. The focus of its product line is a series of non-blocking, fully transparent switches agnostic to both bit-rate and protocol.

Percentage of Equity held by Applicant -- 1.53%

Investment Value /Percentage of Applicant’s Total Assets -- \$0 / 0%

Date of Initial Investment -- June 24, 2002

PolyRemedy, Inc. (“PolyRemedy”) (Category A) -- PolyRemedy manufactures robotic systems for the on-demand fabrication of nano and micro-fiber wound treatments at the point of care. PolyRemedy's system produces customized wound dressings within minutes, measured to fit the wound size and shape and fabricated with the precise material composition necessary to optimally treat the wound at its exact stage of healing and throughout the healing process. The system is also designed to enable the capture and monitoring of wound treatment data with the potential to help evaluate costs, refine clinical protocols and demonstrate evidence-based improvements in wound management.

Percentage of Equity held by Applicant -- 0.98%

Investment Value /Percentage of Applicant’s Total Assets -- \$122,250 / less than 1%

Date of Initial Investment -- February 8, 2008

Questech Corporation (“Questech”)(Category A) -- Questech has patented a light-weight, low-cost, premium metal composite material consisting of a metal face, a polymer core and a ceramic back. Questech manufactures and markets this material as architectural tile and trim for the commercial and residential architecture markets. The company holds several U.S. patents and a Canadian patent for a product and process technology. Questech has also developed extensive trade secrets associated with its manufacturing process.

Percentage of Equity held by Applicant -- 7.50%

Investment Value /Percentage of Applicant’s Total Assets -- \$128,286 / less than 1%

Date of Initial Investment -- May 26, 1994

Siluria Technologies, Inc. (“Siluria”)(Category A) -- Siluria develops next-generation nanomaterials using technology spun out of a leading academic institution. This technology provides for unique control over the structural properties and spatial arrangement of a variety of types of nanomaterials. This control enables the production of new classes of catalysts, optical and electronic products.

Percentage of Equity held by Applicant -- 6.16%

Investment Value /Percentage of Applicant’s Total Assets -- \$42,731 / less than 1%

Date of Initial Investment -- October 17, 2007

SiOnyx, Inc. ("SiOnyx")(Category A) -- SiOnyx develops silicon-based optoelectronic products enabled by its proprietary "Black Silicon." Black silicon is the result of the interaction of a femtosecond laser pulse with silicon in the presence of sulfur hexafluoride. Black silicon has high absorptive properties to visible wavelengths and also absorbs in the infrared, enabling its use in photodetectors, imaging arrays and potentially high-efficiency, thin-film solar cells.

Percentage of Equity held by Applicant -- 25.56%

Investment Value /Percentage of Applicant's Total Assets -- \$3,228,463 / 2.89%

Date of Initial Investment -- May 12, 2006

Solazyme, Inc. ("Solazyme")(Category A) -- Solazyme is a biotechnology company devoted to harnessing the energy-harvesting machinery of algae to produce valuable products. The company utilizes proprietary genetic engineering methods to develop commercially relevant, sugar-driven biochemical pathways. As it develops its algal biotech platform, it will begin to focus on the bioproduction of molecules for the energy, chemical, pharmaceutical and nutraceutical industries.

Percentage of Equity held by Applicant -- 5.77%

Investment Value /Percentage of Applicant's Total Assets -- \$5,377,031 / 4.82%

Date of Initial Investment -- November 24, 2004

Starfire Systems (“Starfire”)(Category A) -- Starfire utilizes patented technology to produce ceramic forming polymers that produce pure silicon carbide. These materials are easy to handle and can be tailored to meet specific product or process requirements. The products and material systems afford customers the ability to form advanced ceramic materials for new or existing applications in aerospace, electronics, industrial ceramics, transportation, filtration and other industries.

Percentage of Equity held by Applicant -- 4.02%

Investment Value /Percentage of Applicant’s Total Assets -- \$0 / 0%

Date of Initial Investment -- May 7, 2004

TetraVitae Bioscience, Inc. (“TetraVitae”) (Category A) -- TetraVitae is developing biobased chemicals, plastics and fuels. Its proprietary technology and expertise in the fields of industrial fermentations, process engineering, microbiology, and cellulosic feedstocks may significantly lower the costs of production, allowing it to compete with and potentially replace petroleum processes used to produce similar products. TetraVitae's initial focus is the production of biobutanol using a proprietary fermentation process and enhanced microorganism platform.

Percentage of Equity held by Applicant -- 2.02%

Investment Value /Percentage of Applicant’s Total Assets -- \$125,000 / less than 1%

Date of Initial Investment -- October 8, 2008

Xradia, Inc. (“Xradia”)(Category A) -- Xradia is commercializing ultra-high-resolution 3D x-ray microscopes and fluorescence imaging systems. Xradia’s proprietary x-ray optics enable the development of extremely high resolution x-ray microscope systems having wide application in fields from semiconductor development and inspection, to advanced materials, environmental science, nanotechnology and life sciences.

Percentage of Equity held by Applicant -- 15.16%

Investment Value /Percentage of Applicant’s Total Assets -- \$4,000,000 / 3.58%

Date of Initial Investment -- December 29, 2006

### 3. Existence of Cash Positions

Applicant is an opportunistic investor that ideally would be as fully invested as practicable in the securities of its target portfolio companies. From time to time, however, Applicant may maintain a substantial portion of its assets in Cash Equivalents. Applicant does not believe it is in its shareholders’ best interest to make investments solely for the purpose of reducing its cash positions. Applicant invests in a highly specialized area (nanotechnology) in which appropriate investment opportunities are not always extant and, when identified, require significant diligence before an investment decision can be made. In fact, in 2008, Applicant actively reviewed over 300 potential investments.

As evidenced in the table below, Applicant made a number of investments in 2008, both in new portfolio companies and in the form of “follow-on” investments in existing portfolio companies. In addition, Applicant expects investment activity to continue in 2009, and Applicant believes that a number of additional investments will likely be made before the end of the year.

It is important to note that Applicant has no motive, indeed has a great discentive, to maintain a significant position in cash. Most notably, cash is a very unattractive asset class in terms of investment return. The higher the level of cash, the greater its potentially depressing impact on the overall internal rate of return of Applicant. Thus, Applicant believes that relying on cash as an asset class for investment returns would ultimately have an extremely negative effect on shareholders and, thus, ultimately on the market price of Applicant's stock.

Applicant raised additional capital in 2008 while it still had substantial cash on hand in anticipation of expected investments. Applicant experienced very strong deal flow (i.e., exposure to potential investments) in 2008 and anticipated, in hindsight correctly, that significant attractive investment opportunities would become available. Thus, in raising capital to supplement the cash already on hand, Applicant was simply acting in light of what it expected to be its needs for cash to fund the expected investment opportunities. Applicant expects to invest or reserve for potential follow-on investment the additional capital raised in the public market within two years.



Harris & Harris Group, Inc.  
Equity Securities - Purchases

| Date     | Company              | Shares /<br>Face | Description                          | Follow-on   | New         | Total       | By Quarter  |
|----------|----------------------|------------------|--------------------------------------|-------------|-------------|-------------|-------------|
| 01/19/08 | D-Wave               | 678,264          | Series 1<br>Class C<br>Preferred     | \$736,019   |             | \$736,019   |             |
| 01/31/08 | Nextreme             | \$377,580        | Bridge<br>Note &<br>Warrant          | \$377,580   |             | \$377,580   |             |
| 02/01/08 | Phoenix<br>Molecular | \$25,000         | Bridge<br>Note                       | \$25,000    |             | \$25,000    |             |
| 02/08/08 | PolyRemedy           | 287,647          | Series B-1<br>Preferred              |             | \$244,500   | \$244,500   |             |
| 02/20/08 | Adesto               | 3,131,470        | Series A<br>Preferred                | \$1,052,174 |             | \$1,052,174 |             |
| 02/25/08 | BridgeLux            | 666,667          | Series D<br>Preferred                | \$1,000,001 |             | \$1,000,001 |             |
| 03/07/08 | Solazyme             | \$2,000,000      | Bridge<br>Note                       | \$2,000,000 |             | \$2,000,000 |             |
| 03/25/08 | Metabolon            | 869,565          | Series B-1<br>Preferred &<br>Warrant | \$1,000,000 |             | \$1,000,000 | \$6,435,274 |
| 05/01/08 | Ancora               | 754,717          | Series B<br>Preferred                | \$800,000   |             | \$800,000   |             |
| 05/06/08 | LLE                  | 7,499,062        | Series A<br>Preferred                |             | \$2,000,000 | \$2,000,000 |             |
| 05/14/08 | NeoPhotonics         | 2,000            | Series X<br>Preferred                | \$200,000   |             | \$200,000   |             |
| 05/27/08 | Nextreme             | \$200,000        | Bridge<br>Note                       | \$200,000   |             | \$200,000   |             |
| 06/04/08 | Phoenix<br>Molecular | \$25,000         | Bridge<br>Note                       | \$25,000    |             | \$25,000    |             |
| 06/25/08 | CSwitch              | \$986,821        | Bridge<br>Note &<br>Warrant          | \$986,821   |             | \$986,821   |             |
| 06/27/08 | Nextreme             | \$200,000        | Bridge<br>Note                       | \$200,000   |             | \$200,000   | \$4,411,821 |
| 07/25/08 | Nextreme             | 1,467,351        | Series B<br>Preferred                | \$800,000   |             | \$800,000   |             |
| 07/31/08 | Solazyme             | 198,508          | Series C<br>Preferred                | \$1,000,000 |             | \$1,000,000 |             |
| 08/05/08 | Mersana              | \$200,000        | Bridge<br>Note                       | \$200,000   |             | \$200,000   |             |
|          | Ensemble             | \$250,286        |                                      | \$250,286   |             | \$250,286   |             |

|                     |           |                             |             |           |             |
|---------------------|-----------|-----------------------------|-------------|-----------|-------------|
| 09/11/08            |           | Bridge<br>Note &<br>Warrant |             |           |             |
|                     |           | Series C                    |             |           |             |
| 09/30/08 D-Wave     | 450,450   | Preferred                   | \$487,804   |           | \$487,804   |
|                     |           | Series B                    |             |           |             |
| 09/30/08 Nextreme   | 1,925,899 | Preferred                   | \$1,050,000 |           | \$1,050,000 |
|                     |           | Series C                    |             |           | \$3,788,090 |
| 10/07/08 Cobalt     | 112,676   | Preferred                   |             | \$240,000 | \$240,000   |
|                     |           | Series B                    |             |           |             |
| 10/08/08 TetraVitae | 118,804   | Preferred                   |             | \$250,000 | \$250,000   |
|                     |           | Bridge<br>Note              |             |           |             |
| 10/31/08 CSwitch    | \$250,000 | Financing                   | \$250,000   |           | \$250,000   |
|                     |           | Debt                        |             |           |             |
| 11/07/08 Siluria    | \$42,042  | Financing                   | \$42,542    |           | \$42,542    |
|                     |           | Bridge<br>Note &<br>Warrant |             |           |             |
| 11/12/08 BioVex     | \$200,000 |                             | \$200,000   |           | \$200,000   |

Harris & Harris Group, Inc.  
Equity Securities – Purchases (Continued)

| Date     | Company | Shares /<br>Face | Description        | Follow-on    | New         | Total        | By Quarter   |
|----------|---------|------------------|--------------------|--------------|-------------|--------------|--------------|
| 11/25/08 | Cobalt  | 63,380           | Series C Preferred | \$134,999    |             | \$134,999    |              |
| 12/01/08 | CFX     | 672,389          | Series A Preferred | \$526,736    |             | \$526,736    |              |
| 12/23/08 | Kovio   | 1,200,000        | Series E Preferred | \$1,500,000  |             | \$1,500,000  | \$3,144,278  |
|          |         |                  |                    | \$15,044,963 | \$2,734,500 | \$17,779,462 | \$17,779,462 |

C. Certification Requested

Applicant hereby requests, pursuant to Section 851(e) of the Code, a certification that it is principally engaged in the furnishing of capital to other corporations that are principally engaged in the development or exploitation of inventions, technological improvements, new processes, or products not previously generally available. Applicant's board of directors has determined that it is in the best interests of Applicant and its shareholders to qualify as a RIC. Among other things, RIC qualification would permit Applicant to avoid taxation at the corporate level. However, based upon the composition of Applicant's investment portfolio and in the absence of the requested certification, Applicant may not satisfy the diversification requirements of Subchapter M as set forth in Section 851(b)(3)(A) of the Code. Thus, without the requested certification, Applicant may not be able to qualify as a RIC.

D. Precedents

The present request by Applicant is substantially identical to its requests for certifications submitted for the tax years ending December 31, 1997 and December 31, 1999 through December 31, 2007, which the Commission granted.<sup>3</sup> Moreover, the Commission has issued certifications pursuant to Section 851(e) of the Code in the past to, among others, Greater Washington Investors, Inc.,<sup>4</sup> American Enterprise Development Corp.,<sup>5</sup> Boston Capital Corp. -- Boston Capital Small Business Investment Corp.,<sup>6</sup> and American Research & Development Corp.<sup>7</sup>

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3 See supra, n. 1.

4 Greater Washington Investors, Inc. (File No. 811-1622), Investment Company Act Release No. 6604 (July 2, 1971) (certification).

5 American Enterprise Development Corp. (File No. 811-1543), Investment Company Act Release No. 6501 (May 3, 1971) (certification).

6 Boston Capital Corp., Boston Capital Small Business Investment Corp. (File No. 811-1650), Investment Company Act Release No. 6054 (May 14, 1970) (certification).

7 American Research & Development Corp. (File No. 811-4817), Investment Company Act Release No. 4817 (Jan. 12, 1967) (certification).

E. Applicant's Legal Arguments

Given the nature of the companies in which Applicant has invested the majority of its assets as well as the benefit for Applicant and its shareholders for Applicant to be able to elect to be subject to taxation under Subchapter M, it is appropriate for the Commission to issue the requested certification pursuant to Section 851(e) of the Code. Section 851(e) was intended to foster the development of companies that “are principally engaged in the development or exploitation of inventions, technological improvements, new processes or products not previously generally available . . .”<sup>8</sup> Accordingly, Section 851(e) is available to those investment companies that are “principally engaged in the development or exploitation of inventions, technological developments, new processes or products not previously generally available . . . .” In determining whether an investment company is ‘principally engaged’ in investing in such companies, the Commission is to give

consideration . . . to the purpose and function of the investment company and to its continuing over-all operation. Ordinarily, for example, it would be requisite that a major portion of the assets of the investment company represent securities in operating companies developing and exploiting new processes and products.<sup>9</sup>

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8 The Revenue Act of 1951, Pub. L. No. 82-183, § 337, 65 Stat. 452 (1951).

9 Id.

In the case of Applicant, as of December 31, 2008, approximately 98.29% of its total assets less Cash Equivalents were invested in the securities of companies engaged in the type and degree of business activities described in Section 851(e). Applicant, furthermore, is committed to continuing investing in such companies.

The Portfolio Companies are consistent with the types of companies that Congress envisioned when it enacted Section 851(e). As noted in connection with the enactment of Section 851(e), “[a]n operating company will not be considered to be engaged in the development of new processes or products merely because the process or development is new to the [operating] company.”<sup>10</sup> Rather, the process or invention developed by the operating company the investment company has invested in “must represent a substantial technological improvement, or be different to a material degree from a product previously available.”<sup>11</sup> The investments of Applicant at issue here fall squarely within the types of portfolio investments identified by Congress as the intended beneficiaries of Section 851(e). The Portfolio Companies are companies that are engaged in pioneering research into a variety of new technical and medical advances that previously have not been available. The advances being developed by the Portfolio Companies range from the development of high-efficiency solar cells and renewable fuels and chemicals to novel therapies for cancer. The technologies being developed by each of the Portfolio Companies represent material advancements in each of the companies’ respective industries; they do not represent mere changes in style or new models.

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10 Id.

11 Id.

Given the composition of Applicant's investment portfolio, Applicant may need to rely upon the provisions of Section 851(e) in order to qualify as a RIC. Obtaining the requested certification is a prerequisite to relying upon Section 851(e). Moreover the Commission, and only the Commission, has been authorized to issue such a certification. Thus, for Applicant to rely upon Section 851(e), the Commission must issue the requested certification.<sup>12</sup> For the reasons set forth above, we believe that it is appropriate in the public interest and consistent with the best interests of Applicant's shareholders for the Commission to issue the requested certification pursuant to Section 851(e), and hereby request that such certification be issued.

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<sup>12</sup> Applicant represents that the limitation of Section 851(e)(2) does not apply to it. That provision generally makes Section 851(e) unavailable to an investment company if more than 25% of the value of its total assets is represented by securities of issuers with respect to each of which the company holds more than 10% of the outstanding voting securities and in respect of each of which the company has held any security for 10 or more years.

III. COMMUNICATIONS

Please address all communications concerning this application and the Notice and Order to:

Daniel B. Wolfe  
President & Chief Operating Officer  
Harris & Harris Group, Inc.  
111 West 57th Street  
Suite 1100  
New York, NY 10019

Please address any questions concerning this application and a copy of any communications, Notice, or Order to:

|                             |                             |
|-----------------------------|-----------------------------|
| Steven B. Boehm, Esq.       | Sandra M. Forman, Esq.      |
| Sutherland Asbill & Brennan | General Counsel             |
| LLP                         |                             |
| 1275 Pennsylvania Avenue,   | Harris & Harris Group, Inc. |
| N.W.                        |                             |
| Washington, D.C. 20004-2415 | 111 West 57th Street        |
|                             | Suite 1100                  |
|                             | New York, NY 10019          |



IV. AUTHORIZATION

Under New York law and the Articles of Incorporation and bylaws of Applicant, the Applicant's business and affairs are to be conducted by its board of directors. In accordance with New York law and the Articles of Incorporation and bylaws of Applicant, a resolution was adopted by Applicant's board of directors authorizing the appropriate officers of Applicant to prepare, execute, and file with the Commission this Application for a certification pursuant to Section 851(e) of the Code. A copy of the resolution is attached hereto as Exhibit A. Accordingly, the persons signing and filing this Application have been duly authorized to do so.

Applicant has caused this Application to be duly signed on its behalf in the county of New York in the City of New York on the 29th day of April, 2009.

HARRIS & HARRIS GROUP, INC.

By: /s/ Daniel B. Wolfe  
Daniel B. Wolfe  
President & Chief Operating Officer

Attest: /s/ Jacqueline M. Matthews  
Jacqueline M. Matthews

VERIFICATION

The undersigned, being duly sworn, deposes and says that he has duly executed the attached Application dated April 29, 2009, for and on behalf of Harris & Harris Group, Inc.; that he is the President and Chief Operating Officer of Harris & Harris Group, Inc.; and that all actions by shareholders, trustees, and other bodies necessary to authorize deponent to execute and file this Application have been taken. Deponent further says that he is familiar with such instrument, and the contents thereof, and the facts set forth are true to the best of his knowledge, information, and belief.

/s/ Daniel B. Wolfe  
Daniel B. Wolfe

Sworn and subscribed to before me, a notary public, this 29th day of April, 2009.

/s/ Jacqueline M. Matthews  
Notary Public, State of New York  
No. 01MA6004743  
Qualified in New York County  
Commission Expires March 30, 2010

EXHIBIT LIST

- A Resolution adopted by the board of directors of Harris & Harris Group, Inc.
  - B Proposed form of Certification.
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HARRIS & HARRIS GROUP, INC.

Resolution by the Board

March 12, 2009

RESOLVED, that the officers of the Company shall be, and each of them hereby is, authorized and directed, by and on behalf of the Company, and in its name, to execute and cause to be filed with the SEC any applications for exemptive relief or certifications, or amendments thereto, or requests for no-action or interpretive positions under the Securities Act of 1933, the Securities Exchange Act of 1934, the Investment Company Act of 1940, or any other applicable federal or state securities law, or applicable provisions of the Internal Revenue Code of 1986, as amended, as such officers, in their sole discretion, deem necessary or to effect such actions or pursue such activities or transactions of the Company as are duly authorized; and further

RESOLVED, that all prior actions taken by the officers of the Company in connection with the filing of such application with the SEC are hereby approved and ratified in all respects.

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PROPOSED FORM OF CERTIFICATION

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In the Matter of Harris & Harris Group, Inc.,  
111 West 57th Street  
Suite 1100  
New York, NY 10019

Admin. Proc. File Nos. 33-\_\_\_\_\_, 814-00176

SECURITIES AND EXCHANGE COMMISSION

INVESTMENT COMPANY ACT OF 1940, Release No. \_\_\_\_\_

[\_\_\_\_\_], 2009

CERTIFICATE PURSUANT TO SECTION 851(e) OF THE  
INTERNAL REVENUE CODE OF 1986, AS AMENDED

Harris & Harris Group, Inc. (“Harris & Harris”), which has elected to be regulated as a business development company under the Investment Company Act of 1940 (the “1940 Act”), has filed an application for an order of the Commission certifying to the Secretary of the Treasury, pursuant to Section 851(e) of the Internal Revenue Code of 1986, as amended (the “Code”), that, for the year ended December 31, 2008, Harris & Harris was principally engaged in the furnishing of capital to other corporations which are principally engaged in the development or exploitation of inventions, technological improvements, new processes, or products not previously generally available. The certification requested is a prerequisite to qualification by Harris & Harris as a “regulated investment company” under Section 851(a) of the Code, pursuant to the provisions of Section 851(e) thereof, for the year ended December 31, 2008.

B-1

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The following table shows the composition of Applicant's total assets as of the end of each calendar quarter of 2008:

|   | 3/31/2008      | 6/30/2008      | 9/30/2008      | 12/31/2008     |
|---|----------------|----------------|----------------|----------------|
| A. Investments in "eligible portfolio companies" described in Section 2(a)(46) of the 1940 Act and believed by the Applicant to be engaged in the business activities required by Section 851(e) of the Code    | \$ 80,202,336  | \$ 89,414,431  | \$ 60,663,002  | \$ 54,125,622  |
| B. Investments in "eligible portfolio companies" described in Section 2(a)(46) of the 1940 Act and treated by Applicant as not engaged in the business activities required by Section 851(e) of the Code*       | 2,219          | 2,219          | 2,219          | 2,219          |
| C. Investments that do not qualify under Section 55(a) of the 1940 Act, but as to which the issuers are believed by Applicant to be engaged in the business activities required by Section 851(e) of the Code** | 2,893,308      | 2,918,874      | 3,277,224      | 2,837,312      |
| D. Investments that do not qualify under Section 55(a) of the 1940 Act and treated by Applicant as not covered by Section 851(e) of the Code  | -              | -              | -              | -              |
| E. Cash, cash items and securities as set forth in Section 55(a)(6) of the 1940 Act, collectively "Cash Equivalents"  | 53,799,254     | 62,113,144     | 57,970,695     | 53,676,249     |
| Total Investments and Cash Equivalents  | \$ 136,897,117 | \$ 154,448,668 | \$ 121,913,140 | \$ 110,641,402 |
| Other Assets  | 3,875,522      | 1,338,315      | 1,163,360      | 986,199        |
| Total Assets  | \$ 140,772,639 | \$ 155,786,983 | \$ 123,076,500 | \$ 111,627,601 |

\* As of December 31, 2008, the sole investment in this category was Exponential Business Development Company.

\*\* As of December 31, 2008, the sole investment in this category was D-Wave Systems Inc.

Harris & Harris has submitted in support of its application, on which this order is based, a detailed description of each of the companies whose securities are held in its portfolio and which it alleges to be development corporations. As reflected in the above table, such entities, excluding investments in issuers described in Categories B and D, comprised the following percentages of the total assets less cash and cash equivalents of Harris & Harris at the end of each of the calendar quarters of 2008: March 31, 95.52%; June 30, 98.57%; September 30, 98.21%; and December 31, 98.29%.

On the basis of an examination of the reports and information filed by Harris & Harris with the Commission pursuant to the provisions of the 1940 Act and the rules and regulations promulgated thereunder, as well as the data and information contained in the application, it appears to the Commission that, during the twelve months ending December 31, 2008, Harris & Harris was principally engaged in the furnishing of capital to other corporations which are principally engaged in the development or exploitation of inventions, technological improvements, new processes or products not previously generally available within the intent of Section 851(e) of the Code.

IT IS THEREFORE CERTIFIED to the Secretary of the Treasury, or his delegate, pursuant to Section 851(e) of the Internal Revenue Code of 1986, as amended, that Harris & Harris which has elected to be regulated as a business development company under the 1940 Act was, for the twelve months ending December 31, 2008, principally engaged in the furnishing of capital to other corporations which are principally engaged in the development or exploitation of inventions, technological improvements, new processes, or products not previously generally available.

For the Commission, by the Division of Investment Management, pursuant to delegated authority.