IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the Application of:

Jang-Hoon YOO et al.

Application No. 11/849,609 Group Art Unit: 2627

Confirmation No. 6003

Filed: September 4, 2007 Examiner:

For: OPTICAL PICKUP COMPATIBLE WITH A DIGITAL VERSATILE DISK AND A RECORDABLE COMPACT DISK USING A HOLOGRAPHIC RING LENS

PRELIMINARY AMENDMENT

Commissioner for Patents
PO Box 1450
Alexandria, VA 22313-1450

Sir:

Before examination of the above-identified application, please amend the application as follows. The following remarks and amendments, which are compliant with 37 CFR §1.173, are respectfully submitted.

IN THE CLAIMS:

Please **AMEND** claims 38, 40, 42, 43, 45, and 46 and **ADD** claims 50-67, as follows:

38. (ONCE AMENDED) An objective lens for an optical pickup for selectively diffracting at least one of plurality of light beams, the lens comprising

a first surface which focuses the plurality of light beams; and

a second surface adjacent to the first surface and having a diffractive pattern to diffract at least one of the plurality of light beams.

40. (ONCE AMENDED) An objective lens for an optical pickup for selectively diffracting at least one of plurality of light beams, the lens comprising

a first surface which focuses the plurality of light beams; and

a second surface adjacent to the first surface and having a diffractive pattern at a location where a numerical aperture of the objective lens is higher than a predetermined numerical aperture value so as to diffract at least one of the plurality of light beams.

42. (ONCE AMENDED) An objective lens for an optical pickup for correcting a spherical aberration caused by one of plurality of light beams, the lens comprising

a first surface which focuses the plurality of light beams; and

a second surface adjacent to the first surface and having a diffractive pattern which diffracts the plurality of light beams and which is disposed to correct the spherical aberration of at least one of the plurality of the one light beams.

43. (ONCE AMENDED) An objective lens for an optical pickup for correcting a spherical aberration caused by one of plurality of light beams, the lens comprising

a first surface which focuses the plurality of light beams and has a curved surface curving from an apex; and

a spherical aberration correction pattern formed below the apex so as to correct the spherical aberration of the one light beam.

45. (ONCE AMENDED) A method of selectively focusing first and second light beams of respectively different wavelengths using an objective lens to form corresponding beam spots of different sizes, the method comprising:

receiving an emitted one of the first and second light beams at an inner region of the objective lens, the inner region including an optical center of the objective lens which has an optical property optimized to focus the first light beam onto a first optical recording medium of a first thicknesses and to focus the second light beam onto a second optical recording medium of a second thickness other than the first thickness; and

receiving the emitted one of the first and second light beams at a diffractive region surrounding said inner region, the diffractive region comprising an optical property optimized so as to diffract at least one of the first and second light beams as a function of wavelength so as to correct for spherical aberrations on the first and second optical recording media.

46. (ONCE AMENDED) A method of selectively focusing light beams on optical recording media of different thicknesses using an objective lens, the method comprising:

receiving an emitted one of the light beams at an inner region of the objective lens, the inner region having an optical property which directs the light beams having corresponding wavelengths to be focused on the corresponding optical recording media having respectively different thicknesses; and

receiving the emitted one of the light beams at a diffractive region, the diffractive region having a wavelength dependence such that the light beams are diffracted so as to correct for spherical aberrations due to the different thicknesses of the optical recording media.

50. (New) The objective lens of claim 38, wherein the first surface does not include the diffractive pattern.

51. (New) The objective lens of claim 38, wherein the diffractive pattern is configured to selectively diffract one of the plurality of light beams.

52. (New) The objective lens of claim 38, wherein the diffractive pattern comprises a holographic pattern.

53. (New) The objective lens of claim 40, wherein the first surface does not include the diffractive pattern.

54. (New) The objective lens of claim 40, wherein the diffractive pattern is configured to selectively diffract one of the plurality of light beams.

55. (New) The objective lens of claim 40, wherein the diffractive pattern comprises a holographic pattern.

56. (New) The objective lens of claim 42, wherein the first surface does not include the diffractive pattern.

57. (New) The objective lens of claim 42, wherein the diffractive pattern is configured to selectively diffract one of the plurality of light beams.

58. (New) The objective lens of claim 42, wherein the diffractive pattern comprises a holographic pattern.

59. (New) The objective lens of claim 43, wherein the first surface does not include the spherical aberration correction pattern.

60. (New) The objective lens of claim 43, wherein the spherical aberration correction pattern is configured to selectively diffract one of the plurality of light beams.

61. (New) The objective lens of claim 43, wherein the spherical aberration correction pattern comprises a holographic pattern.

62. (New) The method of claim 45, wherein the inner region does not include a diffractive region.

63. (New) The method of claim 45, wherein the diffractive pattern is configured to selectively diffract the first and second light beams.

64. (New) The method of claim 45, wherein the diffractive pattern comprises a holographic pattern.

65. (New) The method of claim 46, wherein the inner region does not include the diffractive region.

66. (New) The method of claim 46, wherein the diffractive pattern is configured to selectively diffract the light beams.

67. (New) The method of claim 46, wherein the diffractive pattern comprises a holographic pattern.

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