

46. A magnetoresistive-effect device according to claim 45, wherein the width dimension of the portion of each electrode layer extending over said multilayer film is equal to or larger than $0.05\ \mu\text{m}$.

47. A magnetoresistive-effect device according to claim 32, wherein an insulator layer is deposited between said electrode layers, which are formed above and on both sides of said multilayer film, and the end face of said insulator layer is in direct contact with each of said electrode layers or is separated from each of said electrode layers by a layer.

48. A magnetoresistive-effect device according to claim 32, wherein said multilayer film comprises a central sensitive region which provides an excellent reproduction gain, exhibiting a substantial magnetoresistive effect and insensitive regions which are formed on both sides of said sensitive region, and provide a poor reproduction gain, exhibiting no substantial magnetoresistive effect, and wherein said electrode layers deposited on both sides of said multilayer film extend over the insensitive regions of said multilayer film.

49. A magnetoresistive-effect device according to claim 48, wherein said sensitive region of said multilayer film is defined as a region which results in an output equal to or greater than 50% of a maximum reproduction output while said insensitive regions of said multilayer film are defined as regions, formed on both sides of said sensitive region, which result in an output smaller than 50% of the maximum reproduction output, when the magnetoresistive-effect device having the electrode layers deposited on both sides only of said multilayer film scans a micro track, having a signal recorded thereon, in the direction of a track width.

50. A magnetoresistive-effect device according to claim 48, wherein the width dimension of said sensitive region of said multilayer film is equal to an optical track width.

51. A magnetoresistive-effect device according to claim 48, wherein the angle made between the surface of said protective layer or the surface of said multilayer film with said protective layer removed therefrom and the end face of said electrode layer extending over said insensitive region of said multilayer film is within a range of 20 degrees to 60 degrees.

52. A magnetoresistive-effect device according to claim 48, wherein the angle made between the surface of said multilayer film and the end face of said electrode layer extending over said insensitive region of said multilayer film is within a range of 25 degrees to 45 degrees.

53. A magnetoresistive-effect device according to claim 48, wherein a protective layer is deposited, as a top layer, on top of said multilayer film.

54. A magnetoresistive-effect device according to claim 48, wherein an insulator layer is deposited between said electrode layers, which are deposited above and on both sides of said multilayer film, and the end face of said insulator layer is in direct contact with each of said electrode layers or is separated from each of said electrode layers by a layer.

55. A magnetoresistive-effect device according to claim 53, wherein the angle made between the surface of said protective layer or the surface of said multilayer film with said protective layer removed therefrom and the end face of said electrode layer extending over said insensitive region of said multilayer film is within a range of 20 degrees to 60 degrees.

56. A magnetoresistive-effect device according to claim 53, wherein the angle made between the surface of said

protective layer or the surface of said multilayer film with said protective layer removed therefrom and the end face of said electrode layer extending over said insensitive region of said multilayer film is within a range of 25 degrees to 45 degrees.

57. A magnetoresistive-effect device according to claim 54, wherein the angle made between the surface of said protective layer or the surface of said multilayer film with said protective layer removed therefrom and the end face of said electrode layer extending over said insensitive region of said multilayer film is 60 degrees or greater.

58. A magnetoresistive-effect device according to claim 54, wherein the angle made between the surface of said protective layer or the surface of said multilayer film with said protective layer removed therefrom and the end face of said electrode layer extending over said insensitive region of said multilayer film is 90 degrees or greater.

59. A magnetoresistive-effect device according to claim 54, wherein the width dimension of a portion of each electrode layer extending over said multilayer film is equal to the width dimension of said insensitive region of said multilayer film.

60. A magnetoresistive-effect device according to claim 32, wherein an intermediate layer, made of at least one of a high-resistivity material having a resistance higher than that of said electrode layer and an insulating material, is interposed between said hard bias layer and said electrode layer.

61. A magnetoresistive-effect device according to claim 60, wherein said high-resistivity material, which fabricates said intermediate layer interposed between said hard bias layer and said electrode layer, is at least one material selected from the group consisting of TaSiO_2 , TaSi , CrSiO_2 , CrSi , WSi , WSiO_2 , TiN , and TaN .

62. A magnetoresistive-effect device according to claim 60, wherein said high-resistivity material, which fabricates said intermediate layer interposed between said hard bias layer and said electrode layer, is at least one material selected from the group consisting of Al_2O_3 , SiO_2 , Ti_2O_3 , TiO , WO , AlN , Si_3N_4 , B_4C , SiC , and SiAlON .

63. A magnetoresistive-effect device comprising a multilayer film comprising a magnetoresistive-effect layer, a soft magnetic layer, and a nonmagnetic layer with said magnetoresistive-effect layer and said soft magnetic layer laminated with said nonmagnetic layer interposed therebetween, a pair of hard bias layers deposited on both sides of said multilayer film, and a pair of electrode layers respectively deposited on said hard bias layers, wherein said electrode layers extend over said multilayer film.

64. A magnetoresistive-effect device according to claim 63, wherein the position of at least one of the top edge and the bottom edge of the magnetic coupling junction between said multilayer film and said bias layer in the direction of the movement of a medium is at the same level as the position of at least one of the top surface and the bottom surface of said free magnetic layer or said magnetoresistive layer in the direction of the movement of the medium.

65. A magnetoresistive-effect device according to claim 63, wherein a protective layer is deposited, as a top layer, on top of said multilayer film.

66. A magnetoresistive-effect device according to claim 65, wherein said protective layer is deposited where there is no junction between said multilayer film and said electrode layer.