

Claim 1 of the '997 Patent	Claim 1 of the '734 Patent
A magnetic recording system, comprising:	A magnetic recording system, comprising:
a writing head; and	a writing head; and
a disk, including a magnetic recording medium, comprising	a disk, including a magnetic recording medium, comprising
an essentially non-magnetic substrate	an essentially non-magnetic substrate;
an underlayer <u>formed on the non-magnetic substrate</u> ; and	an underlayer; and
an exchange coupled magnetic multilayer structure, including	an exchange coupled magnetic multilayer structure, including
a hard magnetic storage layer, having a first coercive field $H_s > 0.5$ T, formed on the underlayer; and	a hard magnetic storage layer, <u>formed from a perpendicular anisotropy material</u> , having a first coercive field $H_s > 0.5$ T, <u>formed such that the underlayer is between the non-magnetic substrate and the hard magnetic storage layer</u> ; and
a nucleation host, having a second coercive field H_n without the hard magnetic storage layer, lower than the first coercive field, $H_n < H_s$, wherein	a nucleation host, having a second coercive field H_n without the hard magnetic storage layer, lower than the first coercive field, $H_n < H_s$, wherein
said nucleation host	said nucleation host
is formed on the hard magnetic storage layer such that the hard magnetic storage layer is between the nucleation host and the non-magnetic substrate,	is formed on the hard magnetic storage layer such that the hard magnetic storage layer is between the nucleation host and the non-magnetic substrate,
is exchange coupled to the hard magnetic storage layer, and	is exchange coupled to the hard magnetic storage layer, and
comprises ferromagnetic layers with increasing anisotropy constant K from layer to layer.	comprises <u>at least a first ferromagnetic layer with an anisotropy constant K1 and a second ferromagnetic layer between the first ferromagnetic layer and the hard magnetic storage layer with an increased anisotropy constant K2 greater than K1; wherein</u>
	<u>the first and second ferromagnetic layers are exchange coupled with an exchange coupling layer.</u>

Claim 1 of the '864 Patent	Claim 1 of the '734 Patent
A magnetic recording medium, comprising:	A magnetic recording system, comprising:
	<u>a writing head</u> ; and
	<u>a disk, including a magnetic recording medium, comprising</u>
an essentially non-magnetic substrate;	an essentially non-magnetic substrate;
an underlayer <u>formed on the non-magnetic substrate</u> ; and	an underlayer; and
an exchange coupled magnetic multilayer structure, including	an exchange coupled magnetic multilayer structure, including
a hard magnetic storage layer, having a first coercive field $H_s > 0.5$ T, formed on the underlayer; and	a hard magnetic storage layer, <u>formed from a perpendicular anisotropy material</u> , having a first coercive field $H_s > 0.5$ T, <u>formed such that the underlayer is between the non-magnetic substrate and the hard magnetic storage layer</u> ; and
a nucleation host, having a second coercive field H_n without the hard magnetic storage layer, lower than the first coercive field, $H_n < H_s$, wherein	a nucleation host, having a second coercive field H_n without the hard magnetic storage layer, lower than the first coercive field, $H_n < H_s$, wherein
said nucleation host	said nucleation host
is formed on the hard magnetic storage layer such that the hard magnetic storage layer is between the nucleation host and the non-magnetic substrate,	is formed on the hard magnetic storage layer such that the hard magnetic storage layer is between the nucleation host and the non-magnetic substrate,
is exchange coupled to the hard magnetic storage layer, and	is exchange coupled to the hard magnetic storage layer, and
comprises ferromagnetic layers with increasing anisotropy constant K from layer to layer.	comprises <u>at least a first ferromagnetic layer with an anisotropy constant K1 and a second ferromagnetic layer between the first ferromagnetic layer and the hard magnetic storage layer with an increased anisotropy constant K2 greater than K1; wherein</u>
	<u>the first and second ferromagnetic layers are exchange coupled with an exchange coupling layer.</u>