CLAIMS

~~[1] A plating pretreatment solution for use in a plating pretreatment in production of an aluminum substrate for hard disk devices, the solution comprising iron ions at a concentration of 0.1 g/l to 1.0 g/l, and nitric acid at a concentration of 2.0 wt% to 12.0 wt%.~~

~~[2] The plating pretreatment solutionaccording to claim 1, wherein the concentration of the nitric acid is 5.0 wt% to 10.0 wt%.~~

[1~~3~~] A production method for an aluminum substrate for hard disk devices, comprising a plating step of applying electroless Ni plating to an aluminum substrate, wherein
the electroless Ni plating is Ni-P plating,
a plating pretreatment solution is used for a pretreatment of the plating, the solution including iron ions at a concentration of 0.1 g/l to 1.0 g/l~~,~~ and nitric acid at a concentration of 2.0 wt% to 12.0 wt%, and the pretreatment including both a desmutting treatment and a de-zincate treatment performed after a zincate treatment, and the number of pits on the plated surface of the aluminium substrate is less than or equal to 0.105 counts/mm^2.

~~[4] The production method for an aluminum substrate for hard disk devices according to claim 3, wherein the pretreatment is a desmutting treatment.~~

~~[5] The production method for an aluminum substrate for hard disk devices according to claim 3, wherein the pretreatment is a de-zincate treatment performed after a zincate treatment.~~

~~[6] The production method for an aluminum substrate for hard disk devices according to claim 3, wherein the pretreatment is a desmutting treatment and a de-zincate treatment performed after a zincate treatment.~~

[2~~7~~] The production method for an aluminum substrate for hard disk devices according to ~~any one of~~ claim~~s 3 to 6~~1, wherein the concentration of the nitric acid of the plating pretreatment solution is 5.0 wt% to 10.0 wt%.

~~[8] The production method for an aluminum substrate for hard disk devices according to any one of claims 3 to 7, wherein the electroless Ni plating is Ni-P plating.~~