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(57) **ABSTRACT**

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Provided is a linear motor capable of having enhanced thrust density. The linear motor includes a magnetic pole element and an armature including coils. The magnetic pole element includes magnetic pole element cores and permanent magnets. The magnetic element cores include first cores, second cores, third cores, and fourth cores, each aligned in the linear motion direction. The permanent magnets are interposed between mutually adjacent magnetic element cores among the magnetic element cores. The armature is divided into a first armature portion opposed to the first and third cores, a second armature portion opposed to the first and second cores, a third armature portion opposed to the third and fourth cores.

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