~~∂B is closed and bounded (by assumption) so~~ ~~as looking at $\partial B \cap [k, 2k]^n$~~

∂B is hausdorff dimension $n-1$ so $\forall \delta$ $\exists$ a collection D_k s.t.

$$\sum_k \left(\operatorname{diam}(D_k)\right)^{n-1+\delta} \leq \varepsilon$$

~~let $\eta_m = \min_j \operatorname{diam}(B_{mj})$~~

Take $\delta = 2$,

and choose m s.t. $\delta_m < \min_k \operatorname{diam}(D_k)$

$$\Rightarrow \operatorname{diam}(B_{mj}) < \min_k \operatorname{diam}(D_k)^{\frac{1}{n+1}} \quad \forall j$$

Then, let t_{mj}: center of B_{mj}. Then if A_{ij}, E_ε occur then

$$d(h(t_{mj}), \partial B) \leq \sqrt{n}\, C_\varepsilon \operatorname{diam}(B_{mj})$$

Claim $\mu(\partial B + \varepsilon \text{ boundary}) \longrightarrow 0$ as $\varepsilon \to 0$

that's all I need!

look up ~~covering~~ finite covering boundary and any hausdorff lower-dimensional space must find something!!