It is known that given a measure-preserving action of a group G on a measure-space (X, μ) the formula $\chi(g) = \mu(\{x \in X : gx = x\})$ defines a character on G. Vershik showed that for an ergodic action this character is indecomposable iff the action is *totally nonfree*. Important examples of ergodic totally nonfree actions are actions of *branch groups* on boundaries of rooted trees. We study Cartesian powers of these actions. In particular, we show that they are totally nonfree and split into at most countably many ergodic components. As a corollary, for each branch group we construct countably many indecomposable characters. All necessary preliminaries will be given. The talk is based on a joint work with Rostislav Grigorchuk.