

Product Contract: Bumble

Description: Bug-like immersive experience robot

Intended Customer: Children ages 6-10

Market: Electronic toys

Component	Need	Attribute	Specification
Headmount	Safety	Head mount dimension	Weighs < 1lb Fits head circumference of 18-21"
		Durability	All components(head mount, phone inside head mount, controller and the bug) survive 10 drops from 4 ft. height
Walking Mechanism Motors	Maintains stability of the bug even when short or continuous disturbances are applied to one or more legs	Binary	Y/N
Camera mount	Comprehensive Range of Vision	Rotation angle of camera	> 90°
Electronics	Ability to control bug within reasonable range	Distance between transmitter and receiver	> 30 m
Streaming + App	Immersive Video experience	Video streaming continuously and engaging	< 2 lags/minute
	Exploration experience	Distance that the video still acceptable	> 40 m (free sight)
User testing	Safe product that allows kid to be aware of his surroundings while still providing immersive experience	Viewer that encourages kid to check his surroundings more often, especially when moving	Lightweight Binocular style viewer that still provides VR when held up to face
	Product that cuts cost by integrating existing tech (parents' smartphones) but doesn't put phone at risk of child breaking it	Viewing case that keeps phone safely in place when being used and can protect phone even when viewer is dropped	Clamp/hinge that fastens phone in place; Case made out of strong material