“Most (all?) [Most is the superlative, therefore, all is redundant.] microwave popcorn bags have some solid fat (and think lots of hydrogen-like bonds) which I suspect is the main energy catcher. The oil gets hot and surrounds the kernels, acting as an efficient heat source for the kernel.”

Wrong! Here's a photo' of two minutes (popping corn only) in a 13A microwave oven. An additional two minutes resulted in no “old maids"