

U.S. Patent 4,844,929



Rapid, non-fermentative pickling process.
Date of patent: July 4, 1989.

THE ORIGINAL INVENTION

The rapid, fermentation free pickling technology, for which the patent was granted, uses pickling powders which contain all necessary ingredients and flavors for a one step, rapid and very simple pickling process. One can prepare both reduced, 0.8% salt and regular, 3-4% salt content pickled products. The nature of this invention allows for either the full or partial replacement of current pickling methods and losses inherent to these processes, in addition to providing products of consistently high quality.

This method is applicable to any manufacturing scale, from large scale processing to home preparation. It eliminates all processing steps before packaging, as acidification, sterilization and curing all take place in the final packaging container. The basis for these benefits is the composition of the pickling powder, which is a combination of acidulants, spices, flavors, salt and calcium salts, and the rapid pickling process, which requires 3-6 days for reduced salt and 3-10 days for regular pickled products. An added benefit is that the perceived saltiness of the reduced salt pickles is very close to the saltiness provided by the 3-4% salt content in currently available products.

THE ENHANCED INVENTION

To meet product appearance requirements and to “fool-proof” the production process, as requested by McDonald’s and other potential buyers, A.I.

Labs developed the Instant Pickling process between 1994-95. This work was based on pilot plant trials conducted by the pickle suppliers of McDonald’s and another very large pickle buyer between 1986 and 1991.

The Instant Pickling Process provides the following additional benefits to the processor:

- 2 -5 minute total process time.
- 100 % product yield.
- 12 - 24 hour curing time in final packaging.
- Best ROI for capacity addition/replacement.

The Instant Pickling Process provides the following additional benefits to the customer:

- Very crisp product, even after freezing.
- 12 month shelf life.
- 10 - 20% lower cost.
- First pickle product with freeze-thaw stability, needed for frozen entrees.

This technology utilizes substantial aspects of the rapid, non-fermentative pickling process patent.

MARKET POTENTIAL

The following product specifications were approved by McDonald’s International between 1986 -1989:

Dill Chips, Dill Relish and Sweet Relish.

As an additional service, our chosen licensee (who will have the proper manufacturing facilities and the long-term commitment required to become a supplier to McDonald’s and other large customers) will also be introduced to these potential customers.



Licensing Status:

Please contact Steven Kingsley, AIL Gastroplex
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