CLAIMS

1.- A process for cooking pasta ~~(2)~~ with a humidity content of at least 20% by weight with respect to the weight of the pasta; the humidity percentages relate to the pasta ~~(2)~~ before the process is implemented; the process comprises:

a water feeding step, during which a given quantity of liquid water is fed to a container ~~(4)~~; and

a vapour feeding step, during which a given quantity of water vapour is fed to the container ~~(4)~~ containing a given quantity of pasta for an amount of time of at least 7 seconds~~.~~,

wherein the vapour feeding step is at least partially simultaneous with or subsequent to the water feeding step.

2.- A process according to claim 1, wherein, during the vapour feeding step, a given quantity of water vapour is fed to the container ~~(4)~~ containing a given quantity of pasta for an amount of time up to 50 seconds.

3.- A process according to claim 1, wherein, during the vapour feeding step, a given quantity of water vapour is fed to the container ~~(4)~~ containing a given quantity of pasta for an amount of time up to 40 seconds.

4.- A process according to any one of the preceding claims, wherein the given quantity of water is smaller, by weight, than the given quantity of pasta ~~(2)~~ and has a temperature of at least 50°C.

5.- A process according to any one of the preceding claims, wherein the container ~~(4)~~ comprises at least one opening ~~(20)~~, through which, during the vapour feeding step, part of the water vapour flows out of the container ~~(4)~~.

6.- A process according to any one of the preceding claims, wherein, during at least part of the vapour feeding step, the pressure inside the container ~~(4)~~ is greater than atmospheric pressure, in particular greater than 1 bar.

7.- A process according to any one of the preceding claims, wherein the water vapour has a vapour quality, which is the ratio between the vapour mass and the total mass of liquid plus vapour, smaller than 0.9, ~~in particular~~ or smaller than 0.8.

8.- A process according to any one of the preceding claims, wherein the ratio between the weight of the given quantity of water and the given quantity of pasta ~~(2)~~ ranges from 0.30 to 0.95, ~~in particular~~ or from 0.35 to 0.90.

9.- A process according to any one of the preceding claims, wherein the container ~~(4)~~ has a base wall ~~(19)~~ and an opening ~~(20)~~ opposite the base wall ~~(19)~~; during the vapour feeding step, a lid ~~(21)~~ at least partially covers said opening ~~(20)~~ so as to reduce the outlet of water vapour from the container ~~(4)~~.

10.- A process according to claim 9, wherein the lid ~~(21)~~ completely covers said opening ~~(20)~~ and has an outlet

passage (22), which establishes a communication between the inside of the container (4) and the outside and has an area ranging from 0.09 cm^2 to 0.95 cm^2.

11.- A process according to claim 9 or 10, wherein the lid (21) completely covers said opening (20) and is provided with control means, which are configured to let out gas from the inside of the container (4) when the pressure inside the container (4) exceeds a reference value.

12.- A process according to any one of the preceding claims, wherein, during the water feeding step, a first nozzle (7) feeds the given quantity of liquid water into the container (4); during the vapour feeding step, a second nozzle (16) feeds the given quantity of water vapour into the container (4).

13.- A process according to any one of the preceding claims, wherein the vapour feeding step is at least partially subsequent to the water feeding step, during which the given quantity of liquid water is fed to the container (4) containing the given quantity of pasta (2).

14.- A process according to any one of the preceding claims and comprising an addition step, which is subsequent to the vapour feeding step and during which a sauce is added to the pasta (2), which has already been subjected to the water feeding step and to the vapour feeding step.

15.- A process according to any one of the preceding

claims, wherein the pasta has a humidity of at least 22%, ~~in particular~~ and/or up to 30%, by weight with respect to the weight of the pasta ~~(2)~~.

16.- A process according to any one of the preceding claims, wherein the pasta has a water activity ~~(Aw)~~ ranging from 0.85 to 0.98; the pasta water activity relates to the pasta ~~(2)~~ before the process is implemented.

17.- A process according to any one of ~~the~~ claims ~~from~~ 1 to 12, wherein the pasta ~~(2)~~ has a water activity ~~(Aw)~~ up to 0.91; the pasta water activity relates to the pasta ~~(2)~~ before the process is implemented.

18.- A process according to any one of the preceding claims, wherein the given quantity of pasta inside the container ~~(4)~~ has a weight ranging from 70 to 150 grams; the given quantity of liquid water has a weight ranging from 30 to 130 grams; the given quantity of vapour has a weight ranging from 4 to 20 grams.

19.- A process according to any one of the preceding claims, wherein, during the water feeding step, the given quantity of liquid water is fed to the container ~~(4)~~ containing the given quantity of pasta ~~(2)~~; the container ~~(4)~~ having a code or the conditions of the liquid water and/or water vapour feeding steps; the process further comprises a detection step, during which the code is detected, and a condition selection step, during which, based

on the detected code, the parameters used during the liquid water feeding step and the water vapour feeding steps are selected; ~~in particular~~ and wherein, during the condition selection step, at least one of the following items is selected: the given quantity of liquid water, the given quantity of water vapour, and the time during which the water vapour is fed to the container ~~(4)~~.

~~20.- A process according to any one of the preceding claims, wherein the vapour feeding step is at least partially simultaneous with or subsequent to the water feeding step.~~

~~21.~~20.- A process according to any one of the preceding claims, said pasta ~~(2)~~ has a humidity content of at least 24% by weight relative to the weight of the pasta.

~~22.~~21.- A process according to any one of the preceding claims, and implemented by a machine comprising a device ~~(3)~~ to feed liquid water to said container ~~(4)~~, containing the pasta ~~(2)~~ and a device ~~(5)~~ to feed water vapour to the container ~~(4)~~; the combined action of the device ~~3~~ to feed liquid water and of the device ~~5~~ to feed water vapour leads a cooking of the pasta ~~2~~.

22.- A process according to any one of the preceding claims, wherein the ratio between the weight of the given quantity of water and the weight of the given quantity pasta ranges from approximately 0.30 to approximately 0.95; and the ratio between the weight of the given quantity of vapour

and the weight of the given quantity of pasta ranges from approximately 0.04 to approximately 0.25.