

# Databáze patentů USA

www.uspto.gov

WWW.UPV.CZ

**uspto** UNITED STATES PATENT AND TRADEMARK OFFICE

About Us | Jobs | Contact Us | MyUSPTO

Search uspto.gov

Patents | Trademarks | IP Policy | Learning and Resources | Quick links

## I'm looking for...

Search uspto.gov **Search**

For example, "trademark abandonment", "EFS-Web", or "provisional patent application"

### Help Topic

- > [General information concerning patents](#)
- > [Patent forms](#)
- > [Trademark basics](#)
- > [Financial Manager](#)
- > [Fees and payment](#)

### Learn about the process

#### Patents

- General information concerning patents**  
Find out if a utility, design, or plant patent is right for you
- Patent process overview**  
An overview of a patent application and maintenance process
- Search for patents**  
Find existing patents, published patent applications and other published patent documentation  
[See more patent resources](#)

#### Trademarks

- Trademark basics**  
Learn about trademarks and find out if it's right for you to apply for registration
- Trademark process**  
An overview of a trademark application and maintenance process
- Search trademark database**  
Search database for trademark registrations and applications by mark owner, or serial/registration number with Trademark Electronic Search System (TESS)  
[See more trademark resources](#)

### Fees and payment

#### Fees and payment

Pay fees and learn more about filing fees and other payments.

### Director Initiatives

#### Enhanced Patent Quality Initiative

Learn about USPTO efforts to increase patent quality.

#### PTAB Procedural Reform Initiative

Ensuring PTAB AIA trial proceedings are as effective and fair as possible.

#### Working Group on Regulatory Reform

Zuzana Čapková, 2017

# Search for patents

**New to Patent Searching?** See this important information about searching for patents:

[How to Conduct a Preliminary U.S. Patent Search: A Step by Step Strategy](#) - Web Based Tutorial (38 minutes)

- [The Seven Step Strategy](#) - Outlines a suggested procedure for patent searching
- A [detailed handout](#) of the Seven Step Strategy with examples and screen shots.

Patents may be searched using the following resources:

- [USPTO Patent Full-Text and Image Database \(PatFT\)](#)
- [USPTO Patent Application Full-Text and Image Database \(AppFT\)](#)
- [Global Dossier](#)
- [Patent Application Information Retrieval \(PAIR\)](#)
- [Public Search Facility](#)
- [Patent and Trademark Resource Centers \(PTRCs\)](#)
- [Patent Official Gazette](#)
- [Common Citation Document \(CCD\)](#)
- [Search International Patent Offices](#)
- [Search Published Sequences](#)
- [Patent Assignment Search](#)

Zveř. přihlášky od 3/2001

# Udělené patenty

vyhledávání:    před r. 1976 – číslo, US klasifikace (od r. 1790)  
                          po r. 1976    – full text

## Searching Full Text Patents (Since 1976)

Customize a search on all or a selected group of elements (fields) of a patent.

- [Quick Search](#)
- [Advanced Search](#)
- [Patent Number Search](#)

## Searching PDF Image Patents (Since 1790)

Searches are limited to patent numbers and/or classification codes for pre-1976 patents.

- [View Patent Full-Page Images](#)
- [How to View Patent Images](#)

# Přihlášky

## USPTO Patent Application Full-Text and Image Database (AppFT)

Search for Full-Text and Image versions of patent applications. Customize searches on all fields of a patent application in the AppFT for Full-Text searches.

- [Quick Search](#)
- [Advanced Search](#)
- [Publication Number Search](#)

Searches are limited to patent numbers and/or classification codes for Full-Page images.

[View Publication Full-Page Images](#)

**US PATENT & TRADEMARK OFFICE**  
PATENT APPLICATION FULL TEXT AND IMAGE DATABASE

[Help](#) [Home](#) [Boolean](#) [Manual](#) [Number](#) [PTDLs](#)  
[View Shopping Cart](#)

Data current through November 1, 2012.

Query [\[Help\]](#)

Term 1:  in Field 1: All Fields

AND

Term 2:  in Field 2: All Fields

Select years [\[Help\]](#) 2001-present

**US PATENT & TRADEMARK OFFICE**  
PATENT APPLICATION FULL TEXT AND IMAGE DATABASE

[Help](#) [Home](#) [Boolean](#) [Manual](#) [Number](#) [PTDLs](#)  
[View Shopping Cart](#)

Data current through November 1, 2012.

Query [\[Help\]](#)  Example: ft/needle or ft/syringe andnot (sew or threads)

Select Years [\[Help\]](#) 2001-present

Field Code	Field Name	Field Code	Field Name
DN	<a href="#">Document Number</a>	IN	<a href="#">Inventor Name</a>
PD	<a href="#">Publication Date</a>	IC	<a href="#">Inventor City</a>

## Global Dossier

- jednotné uživatelské rozhraní
- přístup k dokumentům souvisejícím se sledováním a správou duševního vlastnictví
- informace o průběhu řízení
- ukládání dokumentů pro pozdější přezkoumání

The European Patent Office (EPO), Japan Patent Office (JPO), Korean Intellectual Property Office (KIPO), the State Intellectual Property Office of the People's Republic of China (SIPO), and the USPTO.

## Patent Application Information Retrieval (PAIR)

- jednoduchý a bezpečný způsob získávání a stahování informací o stavu patentových přihlášek.

# Udělené patenty - QUICK

## USPTO PATENT FULL-TEXT AND IMAGE DATABASE



Data current through May 6, 2014.

Query [\[Help\]](#)

Term 1:  in Field 1: All Fields

AND

Term 2:  in Field 2: All Fields

Select years [\[Help\]](#)

1976 to present [full-text]

1790 entire DB

Search

Obnovit

Patents from 1790 through 1975 are searchable only by Issue Date, Patent Number, and Current US Classification.

When searching for specific numbers in the Patent Number field, patent numbers must be seven characters in length, excluding commas, which are optional.

# HOME – zadat v rešeršním rozhraní



**United States Patent and Trademark Office**  
An Agency of the Department of Commerce

## Patent Full-Text Databases

### PatFT: Patents

*Full-Text from 1976*

[Quick Search](#)  
[Advanced Search](#)  
[Number Search](#)

[View Full-Page Images](#)

[PatFT Help Files](#)  
[PatFT Status, History](#)  
[PatFT Database Contents](#)

[Report Problems](#)



**Udělené patenty**

<< BOTH SYSTEMS >>

*The databases are operating normally.*

[Notices & Policies](#)

[How to View Images](#)

[Assignment Database](#)

[Public PAIR](#)

[Searching by Class](#)

[Sequence Listings](#)

[Attorneys and Agents](#)

Patentoví zástupci

[Privacy Policy](#)

### AppFT: Applications

*Published since March 2001*

[Quick Search](#)  
[Advanced Search](#)  
[Number Search](#)

[View Full-Page Images](#)

[AppFT Help Files](#)  
[AppFT Status, History](#)

[Report Problems](#)



**Zveř. přihlášky**

# HELP

Full-Text Database Help - Windows Internet Explorer  
http://www.uspto.gov/patft/help/help.htm

Oblíbené položky Navrhované weby

Full-Text Database Help

Stránka Zabezpečení Nástroje

**USPTO PATENT FULL-TEXT AND IMAGE DATABASE**

[Home](#) [Quick](#) [Advanced](#) [Pat Num](#) [Help](#)

## Full-Text Database Help

This page contains links to information on how to use the US Patent Full Text Database Search Pages.

- [Frequently-Asked Questions](#)
  - [Quick Reference Sheet \[PDF\]](#)
  - [Web Database History](#)
- [How to Access Patent Full-page Images.](#)
- [How to Use the Advanced Search Page](#)
- [How to Use the Quick Search Page](#)
- [How to Use the Patent Number Search Page](#)
- [Tips on Field Searching](#)
- [How to Use the Navigational Icons](#)
- [Database Contents](#)
- [State Code Table](#)
- [Country Code Table](#)
- [Stopwords](#)

### FULL-TEXT (Manual Search)

INDEX	EXAMPLE
Abstract Text	<b>ABST</b> /fuel <b>ABST</b> /"fuel injection"
Application Date	<b>APD</b> /YYYYMMDD or m-d-yyyy or m/d/yyyy <b>APD</b> /19950101
Application Number	<b>APN</b> / maximum of 6 digits--0 fill <b>APN</b> /001528
Application Type	<b>APT</b> /code for type of application <b>APT</b> /4 and club
Application Type Codes	1 = Utility 2 = Reissue 4 = Design 5 = Defensive Publication (T) 6 = Statutory Invention Registration (H)

[Help](#)  
[Home](#)  
[Quick](#)  
[Advanced](#)  
[Pat Num](#)  
[Order Copy](#)  
[View Cart](#)  
[PTDLs](#)  
[Previous](#)  
[Next](#)  
[Hit List](#)  
[Prev. List](#)  
[Next List](#)  
[Images](#)

Hotovo Internet | Chráněný režim: Zapnuto 100%



**USPTO PATENT FULL-TEXT AND IMAGE DATABASE**

- [Home](#)
[Quick](#)
[Advanced](#)
[Pat Num](#)
[Help](#)

**Patent Full-Text Database Contents**

**Patent numbers in the US Patent Full-Text Database**

Database	Utility***	Design	Plant	Reissue (R)
1976-2005	3,930,271- current	D242,583- current	PP3,987- current	RE28,671- cu
1790-1975	X1- X11,280; 1-3,930,270	D1- D242,880	PP1- P4,000	RX1-RX125;

\* RDs and REs are issued in the same numeric sequence; RXs are issued in a separate number sequence.

\*\* T patents were not numbered in a continuous sequence; numbers were issued in batches.

\*\*\* X and AI patents have non-withdrawn gaps due to patents lost in the historic Patent Office.

**Examples:**

- 05123456 (utility patent)
- X0000001 (X-patent, pre-1836)
- D0365123 (design patent)
- PP012835 (plant patent)
- RE035136 (reissue patent)
- T0106201 (defensive publication)
- H0001520 (statutory invention registration)
- AI000318 (additional improvement)

To find the most recently issued patent numbers of each patent type (i.e., the highest number issued or for which you can search within each patent type), go to <ftp://ftp.uspto.gov/pub/patdata> and look at the most recent week's .rpt, .txt, or .zip files for a summary of the week's issue.

[List of withdrawn patent numbers](#)

List of patents missing from the full-text database:

- [Utility patents](#)
- [Design patents](#)
- [Plant patents](#)
- [Reissue patents](#)
- [SIRs](#)

U

D

PP

RE

H

Zákonem registrované patenty – statutory invention registration

Znovuvydané patenty

[List of patents missing from the full-page image database](#)

# USPTO PATENT FULL-TEXT AND IMAGE DATABASE

[Home](#)[Quick](#)[Advanced](#)[Pat Num](#)[Help](#)[View Cart](#)

Data current through April 20, 2017..

Query [\[Help\]](#)

Term 1:  in Field 1:

Term 2:  in Field 2:

Select years [\[Help\]](#)

Patents from 1790 through 1975 are searchable only by Issue Date, Patent N  
When searching for specific numbers in the Patent Number field, patent numbers must be seven c

All Fields
Title
Abstract
Issue Date
Patent Number
Application Date
Application Serial Number
Application Type
Applicant Name
Applicant City
Applicant State
Applicant Country
Applicant Type
Assignee Name
Assignee City
Assignee State
Assignee Country
International Classification
Current CPC Classification
Current CPC Classification Class
Current US Classification
Primary Examiner
Assistant Examiner
Inventor Name
Inventor City
Inventor State
Inventor Country
Government Interest
Attorney or Agent
Parent Case Information

## USPTO PATENT FULL-TEXT AND IMAGE DATABASE

[Home](#)[Quick](#)[Advanced](#)[Pat Num](#)[Help](#)[Next List](#)[Bottom](#)[View Cart](#)

Searching US Patent Collection...

### Results of Search in US Patent Collection db for:

IN/does: 176 patents.

Hits 1 through 50 out of 176

Next 50 Hits

Jump To

Refine Search

IN/does

### PAT. NO.

### Title

- 1 [9,601,189](#) [Representing data using a group of multilevel memory cells](#)
- 2 [9,578,361](#) [Methods, apparatus and articles of manufacture to estimate local market audiences of media content](#)
- 3 [9,575,542](#) [Computer power management](#)
- 4 [9,560,753](#) [Light emitting diode load board and manufacturing process thereof](#)
- 5 [9,534,996](#) [Maintaining a measurement gap in a rheometer](#)
- 6 [9,514,044](#) [Multi-level cache tracking table](#)
- 7 [9,442,818](#) [System and method for dynamic data collection](#)
- 8 [9,422,613](#) [Case hardened steel having reduced thermal treatment distortion](#)
- 9 [9,420,320](#) [Methods, apparatus and articles of manufacture to estimate local market audiences of media content](#)
- 10 [9,401,528](#) [Layered materials with improved magnesium intercalation for rechargeable magnesium ion cells](#)
- 11 [9,382,452](#) [Low surface energy bonding adhesive formulation and process for the use thereof](#)

# Udělené patenty-ADVANCED

Query [\[Help\]](#)

## USPTO PATENT FULL-TEXT AND IMAGE DATABASE

- Home
- Quick
- Advanced
- Pat Num
- Help
- View Cart

Data current through May 6, 2014.

Query [\[Help\]](#)

Examples:  
**t**tl/(tennis and (racquet or racket))  
**i**sd/1/8/2002 and motorcycle  
**i**n/newmar-julie

Select Years [\[Help\]](#)

Patents from 1790 through 1975 are searchable only by Issue Date, Patent Number, and Current Classification (US, IPC, or CPC).  
 When searching for specific numbers in the Patent Number field, patent numbers must be seven characters in length, excluding commas, which are optional.

Field Code	Field Name	Field Code	Field Name
PN	<a href="#">Patent Number</a>	IN	<a href="#">Inventor Name</a>
ISD	<a href="#">Issue Date</a>	IC	<a href="#">Inventor City</a>
TTL	<a href="#">Title</a>	IS	<a href="#">Inventor State</a>
ABST	<a href="#">Abstract</a>	ICN	<a href="#">Inventor Country</a>
ACLM	<a href="#">Claim(s)</a>	AANM	<a href="#">Applicant Name</a>
SPEC	<a href="#">Description/Specification</a>	AACI	<a href="#">Applicant City</a>
CCL	<a href="#">Current US Classification</a>	AAST	<a href="#">Applicant State</a>
CPC	<a href="#">Current CPC Classification</a>	AACO	<a href="#">Applicant Country</a>
CPCL	<a href="#">Current CPC Classification Class</a>	AAAT	<a href="#">Applicant Type</a>

# USPTO PATENT FULL-TEXT AND IMAGE DATABASE

- [Home](#)   [Quick](#)   [Advanced](#)   [Pat Num](#)   [Help](#)  
[Bottom](#)   [View Cart](#)

Searching US Patent Collection...

Results of Search in US Patent Collection db for:  
 ((ABST/frying AND ABST/product\$) AND ABST/vacuum): 6 patents.  
 Hits 1 through 6 out of 6

Jump To

Refine Search

PAT. NO.	Title
<a href="#">1 8,613,969</a>	<a href="#">Low pressure deoiling of fried food product</a>
<a href="#">2 8,182,852</a>	<a href="#">Method and device for multistage product frying</a>
<a href="#">3 6,929,812</a>	<a href="#">Device and method for frying products</a>
<a href="#">4 4,156,744</a>	<a href="#">Process for forming shaped potato products and products resulting</a>
<a href="#">5 3,962,355</a>	<a href="#">Method of producing dehydrated fried snack food from apples</a>
<a href="#">6 3,950,266</a>	<a href="#">Method of producing an antioxidant composition from rosemary a</a>

USPTO PATENT FULL-TEXT AND IMAGE DATABASE

[Home](#)   [Quick](#)   [Advanced](#)   [Pat Num](#)   [Help](#)  
[Hit List](#)   [Previous](#)   [Next](#)   [Bottom](#)  
[View Cart](#)   [Add to Cart](#)  
[Images](#)

(3 of 6)

---

United States Patent 6,929,812  
 Van Der Doe August 16, 2005

---

Device and method for frying products

**Abstract**

A device for *frying* food *products* in fat under *vacuum* conditions includes a rotating *vacuum* chamber for centrifuging the *product* after *frying*. The centrifuged *product* is directed through a valve in the bottom of the *vacuum* chamber to a sluice structure, and subsequently is subjected to atmospheric pressure.

---

**Inventors:** Van Der Doe; Martin Hendrik (Krabbendijke, NL)  
**Assignee:** Terra Chips B.V. (AB Krabbenduke, NL)  
**Family ID:** 19760692  
**Appl. No.:** 10/276,299  
**Filed:** November 22, 2002  
**PCT Filed:** May 23, 2001  
**PCT No.:** PCT/NL01/00396  
**371(c)(1),(2),(4) Date:** November 22, 2002  
**PCT Pub. No.:** WO01/91580  
**PCT Pub. Date:** December 06, 2001

---

**Foreign Application Priority Data**

May 24, 2000 [WO]	PCT/NL00/00355
-------------------	----------------

---

**Current U.S. Class:** 426/438; 426/443; 426/523  
**Current CPC Class:** A47J 27/04 (20130101); A47J 27/0817 (20130101); A47J 36/38 (20130101); A23L 19/18 (20160801); A47J 37/1214 (20130101); A47J 37/1228 (20130101); A23L 5/11 (20160801); A47J 37/047 (20130101); A23L 1/01 (20060101); A23L 1/214 (20060101); A47J 37/12 (20060101); A47J 36/38 (20060101); A47J 36/00 (20060101); A47J 27/08 (20060101); A23L 001/01 (20060101); A47J 42/00 (20060101); A47J 42/02 (20060101); A47J 42/04 (20060101); A47J 42/06 (20060101); A47J 42/08 (20060101); A47J 42/10 (20060101); A47J 42/12 (20060101); A47J 42/14 (20060101); A47J 42/16 (20060101); A47J 42/18 (20060101); A47J 42/20 (20060101); A47J 42/22 (20060101); A47J 42/24 (20060101); A47J 42/26 (20060101); A47J 42/28 (20060101); A47J 42/30 (20060101); A47J 42/32 (20060101); A47J 42/34 (20060101); A47J 42/36 (20060101); A47J 42/38 (20060101); A47J 42/40 (20060101); A47J 42/42 (20060101); A47J 42/44 (20060101); A47J 42/46 (20060101); A47J 42/48 (20060101); A47J 42/50 (20060101); A47J 42/52 (20060101); A47J 42/54 (20060101); A47J 42/56 (20060101); A47J 42/58 (20060101); A47J 42/60 (20060101); A47J 42/62 (20060101); A47J 42/64 (20060101); A47J 42/66 (20060101); A47J 42/68 (20060101); A47J 42/70 (20060101); A47J 42/72 (20060101); A47J 42/74 (20060101); A47J 42/76 (20060101); A47J 42/78 (20060101); A47J 42/80 (20060101); A47J 42/82 (20060101); A47J 42/84 (20060101); A47J 42/86 (20060101); A47J 42/88 (20060101); A47J 42/90 (20060101); A47J 42/92 (20060101); A47J 42/94 (20060101); A47J 42/96 (20060101); A47J 42/98 (20060101); A47J 43/00 (20060101); A47J 43/02 (20060101); A47J 43/04 (20060101); A47J 43/06 (20060101); A47J 43/08 (20060101); A47J 43/10 (20060101); A47J 43/12 (20060101); A47J 43/14 (20060101); A47J 43/16 (20060101); A47J 43/18 (20060101); A47J 43/20 (20060101); A47J 43/22 (20060101); A47J 43/24 (20060101); A47J 43/26 (20060101); A47J 43/28 (20060101); A47J 43/30 (20060101); A47J 43/32 (20060101); A47J 43/34 (20060101); A47J 43/36 (20060101); A47J 43/38 (20060101); A47J 43/40 (20060101); A47J 43/42 (20060101); A47J 43/44 (20060101); A47J 43/46 (20060101); A47J 43/48 (20060101); A47J 43/50 (20060101); A47J 43/52 (20060101); A47J 43/54 (20060101); A47J 43/56 (20060101); A47J 43/58 (20060101); A47J 43/60 (20060101); A47J 43/62 (20060101); A47J 43/64 (20060101); A47J 43/66 (20060101); A47J 43/68 (20060101); A47J 43/70 (20060101); A47J 43/72 (20060101); A47J 43/74 (20060101); A47J 43/76 (20060101); A47J 43/78 (20060101); A47J 43/80 (20060101); A47J 43/82 (20060101); A47J 43/84 (20060101); A47J 43/86 (20060101); A47J 43/88 (20060101); A47J 43/90 (20060101); A47J 43/92 (20060101); A47J 43/94 (20060101); A47J 43/96 (20060101); A47J 43/98 (20060101); A47J 44/00 (20060101); A47J 44/02 (20060101); A47J 44/04 (20060101); A47J 44/06 (20060101); A47J 44/08 (20060101); A47J 44/10 (20060101); A47J 44/12 (20060101); A47J 44/14 (20060101); A47J 44/16 (20060101); A47J 44/18 (20060101); A47J 44/20 (20060101); A47J 44/22 (20060101); A47J 44/24 (20060101); A47J 44/26 (20060101); A47J 44/28 (20060101); A47J 44/30 (20060101); A47J 44/32 (20060101); A47J 44/34 (20060101); A47J 44/36 (20060101); A47J 44/38 (20060101); A47J 44/40 (20060101); A47J 44/42 (20060101); A47J 44/44 (20060101); A47J 44/46 (20060101); A47J 44/48 (20060101); A47J 44/50 (20060101); A47J 44/52 (20060101); A47J 44/54 (20060101); A47J 44/56 (20060101); A47J 44/58 (20060101); A47J 44/60 (20060101); A47J 44/62 (20060101); A47J 44/64 (20060101); A47J 44/66 (20060101); A47J 44/68 (20060101); A47J 44/70 (20060101); A47J 44/72 (20060101); A47J 44/74 (20060101); A47J 44/76 (20060101); A47J 44/78 (20060101); A47J 44/80 (20060101); A47J 44/82 (20060101); A47J 44/84 (20060101); A47J 44/86 (20060101); A47J 44/88 (20060101); A47J 44/90 (20060101); A47J 44/92 (20060101); A47J 44/94 (20060101); A47J 44/96 (20060101); A47J 44/98 (20060101); A47J 45/00 (20060101); A47J 45/02 (20060101); A47J 45/04 (20060101); A47J 45/06 (20060101); A47J 45/08 (20060101); A47J 45/10 (20060101); A47J 45/12 (20060101); A47J 45/14 (20060101); A47J 45/16 (20060101); A47J 45/18 (20060101); A47J 45/20 (20060101); A47J 45/22 (20060101); A47J 45/24 (20060101); A47J 45/26 (20060101); A47J 45/28 (20060101); A47J 45/30 (20060101); A47J 45/32 (20060101); A47J 45/34 (20060101); A47J 45/36 (20060101); A47J 45/38 (20060101); A47J 45/40 (20060101); A47J 45/42 (20060101); A47J 45/44 (20060101); A47J 45/46 (20060101); A47J 45/48 (20060101); A47J 45/50 (20060101); A47J 45/52 (20060101); A47J 45/54 (20060101); A47J 45/56 (20060101); A47J 45/58 (20060101); A47J 45/60 (20060101); A47J 45/62 (20060101); A47J 45/64 (20060101); A47J 45/66 (20060101); A47J 45/68 (20060101); A47J 45/70 (20060101); A47J 45/72 (20060101); A47J 45/74 (20060101); A47J 45/76 (20060101); A47J 45/78 (20060101); A47J 45/80 (20060101); A47J 45/82 (20060101); A47J 45/84 (20060101); A47J 45/86 (20060101); A47J 45/88 (20060101); A47J 45/90 (20060101); A47J 45/92 (20060101); A47J 45/94 (20060101); A47J 45/96 (20060101); A47J 45/98 (20060101); A47J 46/00 (20060101); A47J 46/02 (20060101); A47J 46/04 (20060101); A47J 46/06 (20060101); A47J 46/08 (20060101); A47J 46/10 (20060101); A47J 46/12 (20060101); A47J 46/14 (20060101); A47J 46/16 (20060101); A47J 46/18 (20060101); A47J 46/20 (20060101); A47J 46/22 (20060101); A47J 46/24 (20060101); A47J 46/26 (20060101); A47J 46/28 (20060101); A47J 46/30 (20060101); A47J 46/32 (20060101); A47J 46/34 (20060101); A47J 46/36 (20060101); A47J 46/38 (20060101); A47J 46/40 (20060101); A47J 46/42 (20060101); A47J 46/44 (20060101); A47J 46/46 (20060101); A47J 46/48 (20060101); A47J 46/50 (20060101); A47J 46/52 (20060101); A47J 46/54 (20060101); A47J 46/56 (20060101); A47J 46/58 (20060101); A47J 46/60 (20060101); A47J 46/62 (20060101); A47J 46/64 (20060101); A47J 46/66 (20060101); A47J 46/68 (20060101); A47J 46/70 (20060101); A47J 46/72 (20060101); A47J 46/74 (20060101); A47J 46/76 (20060101); A47J 46/78 (20060101); A47J 46/80 (20060101); A47J 46/82 (20060101); A47J 46/84 (20060101); A47J 46/86 (20060101); A47J 46/88 (20060101); A47J 46/90 (20060101); A47J 46/92 (20060101); A47J 46/94 (20060101); A47J 46/96 (20060101); A47J 46/98 (20060101); A47J 47/00 (20060101); A47J 47/02 (20060101); A47J 47/04 (20060101); A47J 47/06 (20060101); A47J 47/08 (20060101); A47J 47/10 (20060101); A47J 47/12 (20060101); A47J 47/14 (20060101); A47J 47/16 (20060101); A47J 47/18 (20060101); A47J 47/20 (20060101); A47J 47/22 (20060101); A47J 47/24 (20060101); A47J 47/26 (20060101); A47J 47/28 (20060101); A47J 47/30 (20060101); A47J 47/32 (20060101); A47J 47/34 (20060101); A47J 47/36 (20060101); A47J 47/38 (20060101); A47J 47/40 (20060101); A47J 47/42 (20060101); A47J 47/44 (20060101); A47J 47/46 (20060101); A47J 47/48 (20060101); A47J 47/50 (20060101); A47J 47/52 (20060101); A47J 47/54 (20060101); A47J 47/56 (20060101); A47J 47/58 (20060101); A47J 47/60 (20060101); A47J 47/62 (20060101); A47J 47/64 (20060101); A47J 47/66 (20060101); A47J 47/68 (20060101); A47J 47/70 (20060101); A47J 47/72 (20060101); A47J 47/74 (20060101); A47J 47/76 (20060101); A47J 47/78 (20060101); A47J 47/80 (20060101); A47J 47/82 (20060101); A47J 47/84 (20060101); A47J 47/86 (20060101); A47J 47/88 (20060101); A47J 47/90 (20060101); A47J 47/92 (20060101); A47J 47/94 (20060101); A47J 47/96 (20060101); A47J 47/98 (20060101); A47J 48/00 (20060101); A47J 48/02 (20060101); A47J 48/04 (20060101); A47J 48/06 (20060101); A47J 48/08 (20060101); A47J 48/10 (20060101); A47J 48/12 (20060101); A47J 48/14 (20060101); A47J 48/16 (20060101); A47J 48/18 (20060101); A47J 48/20 (20060101); A47J 48/22 (20060101); A47J 48/24 (20060101); A47J 48/26 (20060101); A47J 48/28 (20060101); A47J 48/30 (20060101); A47J 48/32 (20060101); A47J 48/34 (20060101); A47J 48/36 (20060101); A47J 48/38 (20060101); A47J 48/40 (20060101); A47J 48/42 (20060101); A47J 48/44 (20060101); A47J 48/46 (20060101); A47J 48/48 (20060101); A47J 48/50 (20060101); A47J 48/52 (20060101); A47J 48/54 (20060101); A47J 48/56 (20060101); A47J 48/58 (20060101); A47J 48/60 (20060101); A47J 48/62 (20060101); A47J 48/64 (20060101); A47J 48/66 (20060101); A47J 48/68 (20060101); A47J 48/70 (20060101); A47J 48/72 (20060101); A47J 48/74 (20060101); A47J 48/76 (20060101); A47J 48/78 (20060101); A47J 48/80 (20060101); A47J 48/82 (20060101); A47J 48/84 (20060101); A47J 48/86 (20060101); A47J 48/88 (20060101); A47J 48/90 (20060101); A47J 48/92 (20060101); A47J 48/94 (20060101); A47J 48/96 (20060101); A47J 48/98 (20060101); A47J 49/00 (20060101); A47J 49/02 (20060101); A47J 49/04 (20060101); A47J 49/06 (20060101); A47J 49/08 (20060101); A47J 49/10 (20060101); A47J 49/12 (20060101); A47J 49/14 (20060101); A47J 49/16 (20060101); A47J 49/18 (20060101); A47J 49/20 (20060101); A47J 49/22 (20060101); A47J 49/24 (20060101); A47J 49/26 (20060101); A47J 49/28 (20060101); A47J 49/30 (20060101); A47J 49/32 (20060101); A47J 49/34 (20060101); A47J 49/36 (20060101); A47J 49/38 (20060101); A47J 49/40 (20060101); A47J 49/42 (20060101); A47J 49/44 (20060101); A47J 49/46 (20060101); A47J 49/48 (20060101); A47J 49/50 (20060101); A47J 49/52 (20060101); A47J 49/54 (20060101); A47J 49/56 (20060101); A47J 49/58 (20060101); A47J 49/60 (20060101); A47J 49/62 (20060101); A47J 49/64 (20060101); A47J 49/66 (20060101); A47J 49/68 (20060101); A47J 49/70 (20060101); A47J 49/72 (20060101); A47J 49/74 (20060101); A47J 49/76 (20060101); A47J 49/78 (20060101); A47J 49/80 (20060101); A47J 49/82 (20060101); A47J 49/84 (20060101); A47J 49/86 (20060101); A47J 49/88 (20060101); A47J 49/90 (20060101); A47J 49/92 (20060101); A47J 49/94 (20060101); A47J 49/96 (20060101); A47J 49/98 (20060101); A47J 50/00 (20060101); A47J 50/02 (20060101); A47J 50/04 (20060101); A47J 50/06 (20060101); A47J 50/08 (20060101); A47J 50/10 (20060101); A47J 50/12 (20060101); A47J 50/14 (20060101); A47J 50/16 (20060101); A47J 50/18 (20060101); A47J 50/20 (20060101); A47J 50/22 (20060101); A47J 50/24 (20060101); A47J 50/26 (20060101); A47J 50/28 (20060101); A47J 50/30 (20060101); A47J 50/32 (20060101); A47J 50/34 (20060101); A47J 50/36 (20060101); A47J 50/38 (20060101); A47J 50/40 (20060101); A47J 50/42 (20060101); A47J 50/44 (20060101); A47J 50/46 (20060101); A47J 50/48 (20060101); A47J 50/50 (20060101); A47J 50/52 (20060101); A47J 50/54 (20060101); A47J 50/56 (20060101); A47J 50/58 (20060101); A47J 50/60 (20060101); A47J 50/62 (20060101); A47J 50/64 (20060101); A47J 50/66 (20060101); A47J 50/68 (20060101); A47J 50/70 (20060101); A47J 50/72 (20060101); A47J 50/74 (20060101); A47J 50/76 (20060101); A47J 50/78 (20060101); A47J 50/80 (20060101); A47J 50/82 (20060101); A47J 50/84 (20060101); A47J 50/86 (20060101); A47J 50/88 (20060101); A47J 50/90 (20060101); A47J 50/92 (20060101); A47J 50/94 (20060101); A47J 50/96 (20060101); A47J 50/98 (20060101); A47J 51/00 (20060101); A47J 51/02 (20060101); A47J 51/04 (20060101); A47J 51/06 (20060101); A47J 51/08 (20060101); A47J 51/10 (20060101); A47J 51/12 (20060101); A47J 51/14 (20060101); A47J 51/16 (20060101); A47J 51/18 (20060101); A47J 51/20 (20060101); A47J 51/22 (20060101); A47J 51/24 (20060101); A47J 51/26 (20060101); A47J 51/28 (20060101); A47J 51/30 (20060101); A47J 51/32 (20060101); A47J 51/34 (20060101); A47J 51/36 (20060101); A47J 51/38 (20060101); A47J 51/40 (20060101); A47J 51/42 (20060101); A47J 51/44 (20060101); A47J 51/46 (20060101); A47J 51/48 (20060101); A47J 51/50 (20060101); A47J 51/52 (20060101); A47J 51/54 (20060101); A47J 51/56 (20060101); A47J 51/58 (20060101); A47J 51/60 (20060101); A47J 51/62 (20060101); A47J 51/64 (20060101); A47J 51/66 (20060101); A47J 51/68 (20060101); A47J 51/70 (20060101); A47J 51/72 (20060101); A47J 51/74 (20060101); A47J 51/76 (20060101); A47J 51/78 (20060101); A47J 51/80 (20060101); A47J 51/82 (20060101); A47J 51/84 (20060101); A47J 51/86 (20060101); A47J 51/88 (20060101); A47J 51/90 (20060101); A47J 51/92 (20060101); A47J 51/94 (20060101); A47J 51/96 (20060101); A47J 51/98 (20060101); A47J 52/00 (20060101); A47J 52/02 (20060101); A47J 52/04 (20060101); A47J 52/06 (20060101); A47J 52/08 (20060101); A47J 52/10 (20060101); A47J 52/12 (20060101); A47J 52/14 (20060101); A47J 52/16 (20060101); A47J 52/18 (20060101); A47J 52/20 (20060101); A47J 52/22 (20060101); A47J 52/24 (20060101); A47J 52/26 (20060101); A47J 52/28 (20060101); A47J 52/30 (20060101); A47J 52/32 (20060101); A47J 52/34 (20060101); A47J 52/36 (20060101); A47J 52/38 (20060101); A47J 52/40 (20060101); A47J 52/42 (20060101); A47J 52/44 (20060101); A47J

### USPTO PATENT FULL-TEXT AND IMAGE DATABASE

[Home](#)
[Quick](#)
[Advanced](#)
[Pat Num](#)
[Help](#)

[Hit List](#)
[Previous](#)
[Next](#)
[Bottom](#)

[View Cart](#)
[Add to Cart](#)

[Images](#)

( 6 of 20 )

United States Patent  
Van Der Doe

ISD



6,929,812  
August 16, 2005

Device and method for frying products

#### Abstract

A device for frying food products in fat under vacuum conditions includes a rotating vacuum chamber for centrifuging the product after frying. The centrifuged product is directed through a valve in the bottom of the vacuum chamber to a sluice structure, and subsequently is subjected to atmospheric pressure.

Inventors: **Van Der Doe; Martin Hendrik** (Krabbendijke, NL)  
 Assignee: **Terra Chips B.V.** (AB Krabbenduke, NL)  
 Appl. No.: **10/276,299**  
 Filed: **November 22, 2002**  
 PCT Filed: **May 23, 2001**  
 PCT No.: **PCT/NL01/00396**  
 371(c)(1),(2),(4) Date: **November 22, 2002**  
 PCT Pub. No.: **WO01/91580**  
 PCT Pub. Date: **December 06, 2001**



APD

#### Foreign Application Priority Data

May 24, 2000 [WO]

PCT/NL00/00355

Current U.S. Class:

426/438 ; 426/443; 426/523

Current International Class:

A23L 1/01 (20060101); A23L 1/214 (20060101); A23L 1/217 (20060101); A47J 37/12 (20060101); A47J 36/38 (20060101); A47J 36/00 (20060101); A47J 27/08 (20060101); A23L 001/01 (20060101)

Field of Search:

426/443,438,486-488,523 99/407,409,472 34/58-59



US006929812B2

(12) **United States Patent**  
**Van Der Doe**

(10) **Patent No.:** US 6,929,812 B2

(45) **Date of Patent:** Aug. 16, 2005

Full Text  
Help

Go to Page:


Sections:

- Front Page
- Drawings
- Specifications
- Claims

Full Document:

Full Pages

(54) **DEVICE AND METHOD FOR FRYING PRODUCTS**

(75) Inventor: **Martin Hendrik Van Der Doe**,  
Krabbendijke (NL)

(73) Assignee: **Terra Chips B.V.**, AB Krabbenduke  
(NL)

(\*) Notice: Subject to any disclaimer, the term of this  
patent is extended or adjusted under 35  
U.S.C. 154(b) by 36 days.

(21) Appl. No.: **10/276,299**

(22) PCT Filed: **May 23, 2001**

(86) PCT No.: **PCT/NL01/00396**

§ 371 (c)(1),  
(2), (4) Date: **Nov. 22, 2002**

(87) PCT Pub. No.: **WO01/91580**

PCT Pub. Date: **Dec. 6, 2001**

(65) **Prior Publication Data**

US 2004/0031396 A1 Feb. 19, 2004

(30) **Foreign Application Priority Data**

May 24, 2000 (WO) ..... PCT/NL00/00355

(51) **Int. Cl.**<sup>7</sup> ..... **A23L 1/01**

(52) **U.S. Cl.** ..... **426/438**; 426/443; 426/523

(58) **Field of Search** ..... 426/443, 438,  
426/486-488, 523; 99/407, 409, 472; 34/58-59

(56) **References Cited**

**U.S. PATENT DOCUMENTS**

3,718,485	A	*	2/1973	Lankford	426/438
3,812,775	A		5/1974	Sijbring	99/404
4,059,046	A	*	11/1977	Yamazaki et al.	99/355
4,566,376	A	*	1/1986	Webb	99/468
4,828,859	A		5/1989	Imai	426/302
4,852,475	A		8/1989	Yang	99/404
5,168,797	A	*	12/1992	Wang	99/342
5,490,453	A	*	2/1996	Mackay	99/495
5,743,840	A	*	4/1998	Carr	494/13
5,988,051	A		11/1999	Hashiguchi et al.	99/472

**FOREIGN PATENT DOCUMENTS**

EP	0 234 996 A1	9/1987
EP	0234996	9/1987
EP	0545909	6/1993
EP	0 545 909 A2	6/1993
EP	000550405 A2 *	7/1993

\* cited by examiner

*Primary Examiner*—Drew Becker

(74) *Attorney, Agent, or Firm*—Young & Thompson

(57) **ABSTRACT**

A device for frying food products in fat under vacuum conditions includes a rotating vacuum chamber for centrifuging the product after frying. The centrifuged product is directed through a valve in the bottom of the vacuum chamber to a sluice structure, and subsequently is subjected to atmospheric pressure.

**13 Claims, 2 Drawing Sheets**

# Zveřejněné přihlášky patentů- QUICK

**US PATENT & TRADEMARK OFFICE**  
**PATENT APPLICATION FULL TEXT AND IMAGE DATABASE**

[Help](#) [Home](#) [Boolean](#) [Manual](#) [Number](#)

[View Shopping Cart](#)

Data current through April 20, 2017.

**ADVANCED**

Query [\[Help\]](#)

Term 1:  in Field 1:

Term 2:  in Field 2:

Select years [\[Help\]](#)

Plnotextové vyhledávání zveřejněných patentových přihlášek od 3/2001 do současnosti. Aktualizace 1 x týdně.



# Zveřejněné přihlášky patentů- MANUAL

## US PATENT & TRADEMARK OFFICE PATENT APPLICATION FULL TEXT AND IMAGE DATABASE

[Help](#)[Home](#)[Boolean](#)[Manual](#)[Number](#)[View Shopping Cart](#)

Data current through May 1, 2014.

Query [\[Help\]](#)

Example: `t1/needle or t1/syringe andnot (sew or thread$)`

Select Years [\[Help\]](#)

2001-present ▼

Field Code	Field Name	Field Code	Field Name
DN	<a href="#">Document Number</a>	IN	<a href="#">Inventor Name</a>
PD	<a href="#">Publication Date</a>	IC	<a href="#">Inventor City</a>
TTL	<a href="#">Title</a>	IS	<a href="#">Inventor State</a>
ABST	<a href="#">Abstract</a>	ICN	<a href="#">Inventor Country</a>
ACLM	<a href="#">Claim(s)</a>	AANM	<a href="#">Applicant Name</a>
SPEC	<a href="#">Description/Specification</a>	AACI	<a href="#">Applicant City</a>
CCL	<a href="#">Current US Classification</a>	AAST	<a href="#">Applicant State</a>
CPC	<a href="#">Current CPC Classification</a>	AACO	<a href="#">Applicant Country</a>
CPCL	<a href="#">Current CPC Classification Class</a>	AAAT	<a href="#">Applicant Type</a>
ICL	<a href="#">International Classification</a>	GOVT	<a href="#">Government Interest</a>
APT	<a href="#">Applicant Type</a>	ANN	<a href="#">Applicant Name</a>

## Query [\[Help\]](#)

ABST/frying AND ABST/product\$ AND ABST/vacuum

# US PATENT & TRADEMARK OFFICE

## PATENT APPLICATION FULL TEXT AND IMAGE DATABASE

[Help](#)[Home](#)[Boolean](#)[Manual](#)[Number](#)[View Shopping Cart](#)

Data current through May 1, 2014.

### Query [\[Help\]](#)

ABST/frying AND ABST/product\$ AND ABST/vacuum

Example: ttl/needle or ttl/syringe andnot (sew or thread\$)

### Select Years [\[Help\]](#)

2001-present ▼

Field Code	Field Name	Field Code	Field Name
DN	<a href="#">Document Number</a>	IN	<a href="#">Inventor Name</a>
PD	<a href="#">Publication Date</a>	IC	<a href="#">Inventor City</a>
TTL	<a href="#">Title</a>	IS	<a href="#">Inventor State</a>
ABST	<a href="#">Abstract</a>	ICN	<a href="#">Inventor Country</a>
ACLM	<a href="#">Claim(s)</a>	AANM	<a href="#">Applicant Name</a>
SPEC	<a href="#">Description/Specification</a>	AACI	<a href="#">Applicant City</a>
CCL	<a href="#">Current US Classification</a>	AAST	<a href="#">Applicant State</a>
CPC	<a href="#">Current CPC Classification</a>	AACO	<a href="#">Applicant Country</a>
CPCL	<a href="#">Current CPC Classification Class</a>	AAAT	<a href="#">Applicant Type</a>
ICL	<a href="#">International Classification</a>	GOVT	<a href="#">Government Interest</a>
APT	<a href="#">Application Type</a>	AN	<a href="#">Assignee Name</a>
APN	<a href="#">Application Serial Number</a>	AC	<a href="#">Assignee City</a>
APD	<a href="#">Application Date</a>	AS	<a href="#">Assignee State</a>
FMID	<a href="#">Patent Family ID</a>	ACN	<a href="#">Assignee Country</a>

# US PATENT & TRADEMARK OFFICE

## PATENT APPLICATION FULL TEXT AND IMAGE DATABASE

[Help](#)[Home](#)[Boolean](#)[Manual](#)[Number](#)[PTDLs](#)[Bottom](#)[View Shopping Cart](#)

*Searching PGPUB Production Database March 15th - September 30th 2001...*

**Results of Search in PGPUB Production Database March 15th - September 30th 2001 for:**  
**ABST/frying AND ABST/product\$ AND ABST/vacuum: 5 applications.**

*Hits 1 through 5 out of 5*

Jump To

Refine Search

ABST/frying AND ABST/product\$ AND ABST/vacuum

### **PUB. APP. NO. Title**

- 1 [20130171325](#) [VACUUM DRIED FRUIT PRODUCT](#)
- 2 [20130171324](#) [PROCESS FOR MAKING VACUUM DRIED FRUIT PRODUCT](#)
- 3 [20120167779](#) [METHOD AND DEVICE FOR MULTISTAGE PRODUCT FRYING](#)
- 4 [20090304878](#) [Method and Device for Multistage Product Frying](#)
- 5 [20040031396](#) [Device and method for frying products](#)

[Top](#)[View Shopping Cart](#)[Help](#)[Home](#)[Boolean](#)[Manual](#)[Number](#)[PTDLs](#)



US 20040031396A1

(19) **United States**

(12) **Patent Application Publication** (10) **Pub. No.: US 2004/0031396 A1**

**Van Der Doe**

(43) **Pub. Date: Feb. 19, 2004**

(54) **DEVICE AND METHOD FOR FRYING PRODUCTS**

(30) **Foreign Application Priority Data**

May 24, 2000 (WO)..... PCT/NL00/00355

(76) Inventor: **Martin Hendrik Van Der Doe,**  
Krabbendijke (NL)

**Publication Classification**

Correspondence Address:  
**Charles W Fallow**  
**Shoemaker and Mattare**  
**P O Box 2286**  
**Arlington, VA 22202-0286 (US)**

(51) **Int. Cl.<sup>7</sup>** ..... **A23L 1/00; A47J 37/12**  
(52) **U.S. Cl.** ..... **99/403; 99/407; 99/472**

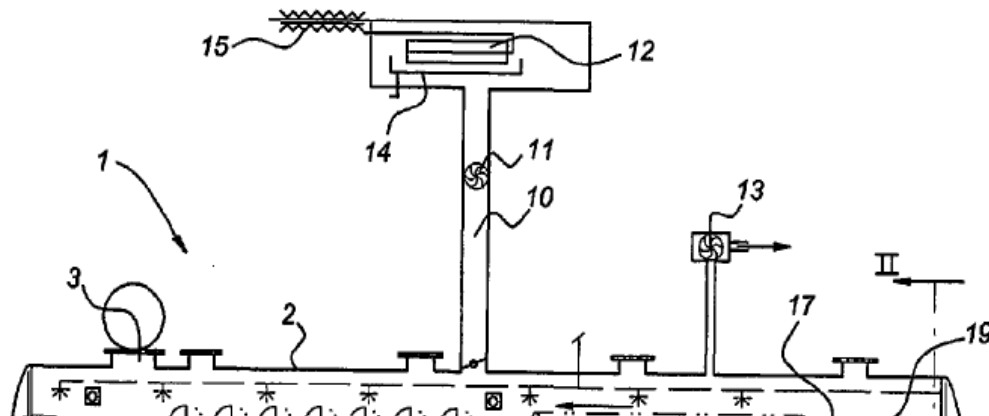
(57) **ABSTRACT**

A device for frying food products in fat under vacuum conditions includes a rotating vacuum chamber for centrifuging the product after frying. The centrifuged product is directed through a valve in the bottom of the vacuum chamber to a slice structure, and subsequently is subjected to atmospheric pressure.

(21) Appl. No.: **10/276,299**

(22) PCT Filed: **May 23, 2001**

(86) PCT No.: **PCT/NL01/00396**





### PatFT: Patents

*Full-Text from 1976*

[Quick Search](#)  
[Advanced Search](#)  
[Number Search](#)

[View Full-Page Images](#)

[PatFT Help Files](#)  
[PatFT Status, History](#)  
[PatFT Database Contents](#)

[Report Problems](#)

<< BOTH SYSTEMS >>

*The databases are operating normally.*

[Notices & Policies](#)

[How to View Images](#)

[Assignment Database](#)

[Public PAIR](#)

[Searching by Class](#)

[Sequence Listings](#)

[Attorneys and Agents](#)

[Privacy Policy](#)

### AppFT: Applications

*Published since March 2001*

[Quick Search](#)  
[Advanced Search](#)  
[Number Search](#)

[View Full-Page Images](#)

[AppFT Help Files](#)  
[AppFT Status, History](#)

[Report Problems](#)

Current U.S. Class:

426/438 ; 426/443; 426/523

Current CPC Class:

A23L 1/0107 (20130101); A23L 1/217 (20130101); A47J 27/04 (20130101); A47J 27/0817 (20130101); A47J 36/38 (20130101); A47J 37/047 (20130101); A47J 37/1214 (20130101); A47J 37/1228 (20130101)

Current International Class:

A23L 1/01 (20060101); A23L 1/214 (20060101); A23L 1/217 (20060101); A47J 37/12 (20060101); A47J 36/38 (20060101); A47J 37/04 (20060101); A47J 37/08 (20060101); A47J 37/12 (20060101)

## Search Patent Classification Systems

CSD Home CPC USPC Classification Revision Advanced Search Contacts Help

### Access Classification Information by Symbol

Select Classification System:  CPC  USPC

Enter Classification symbol: e.g., B02C or D06P 1/5264

Select Content:

Scheme  
Definitions

Select output format:  HTML  PDF

Submit Clear

A47J

Schedule

Definitions

Statistical Mapping from USPC to CPC

USPC to IPC Concordance

USPC to LOCARNO (for Designs)

## Search Patent Classification Systems

CSD Home CPC USPC Classification Revision Advanced Search Contacts Help

### Access Classification Information by Symbol

Select Classification System:  CPC  USPC

Enter Classification symbol: 99 / 403

Select Content:

Schedule  
Definitions  
Statistical Mapping from USPC to CPC  
USPC to IPC Concordance  
USPC to LOCARNO (for Designs)

Select output format:  HTML  PDF

Submit Clear

399 - 400	A 47 J	37 / 06
402	A 47 J	37 / 06
403 - 418	A 47 J	37 / 12
419 - 421TP	A 47 J	37 / 04
421A - 421H	A 47 J	37 / 06
421A	A 47 J	43 / 18

převodník

99/403

# DESIGN PATENT

- 1 = Utility
- 2 = Reissue
- 4 = Design
- 5 = Defensive Publication
- 6 = Plant
- 7 = Statutory Invention Registration

US Patent Full-Text Database Manual Search - Windows Internet Explorer

http://patft.uspto.gov/netahtml/PTO/search-adv.htm

Data current through November 6, 2012.

Query [\[Help\]](#)

APT/4 AND ICL/A23\$

Examples:  
 ttl(tennis and (racquet or racket))  
 isd/1/8/2002 and motorcycle  
 in/newmar-julie

Select Years [\[Help\]](#)

1976 to present [full-text]

Patents from 1790 through 1975 are searchable only by Issue Date, Patent Number, and Current US Classification.  
 When searching for specific numbers in the Patent Number field, patent numbers must be seven characters in length, excluding commas, which are optional.

Field Code	Field Name	Field Code	Field Name
PN	<a href="#">Patent Number</a>	IN	<a href="#">Inventor Name</a>
ISD	<a href="#">Issue Date</a>	IC	<a href="#">Inventor City</a>
TTL	<a href="#">Title</a>	IS	<a href="#">Inventor State</a>
ABST	<a href="#">Abstract</a>	ICN	<a href="#">Inventor Country</a>
ACLM	<a href="#">Claim(s)</a>	LREP	<a href="#">Attorney or Agent</a>
SPEC	<a href="#">Description/Specification</a>	AN	<a href="#">Assignee Name</a>
CCL	<a href="#">Current US Classification</a>	AC	<a href="#">Assignee City</a>
ICL	<a href="#">International Classification</a>	AS	<a href="#">Assignee State</a>
APN	<a href="#">Application Serial Number</a>	ACN	<a href="#">Assignee Country</a>
APD	<a href="#">Application Date</a>	EXP	<a href="#">Primary Examiner</a>
PARN	<a href="#">Parent Case Information</a>	EXA	<a href="#">Assistant Examiner</a>
RLAP	<a href="#">Related US App. Data</a>	REF	<a href="#">Referenced By</a>
REIS	<a href="#">Reissue Data</a>	FREF	<a href="#">Foreign References</a>
PRIR	<a href="#">Foreign Priority</a>	OREF	<a href="#">Other References</a>
PCT	<a href="#">PCT Information</a>	GOVT	<a href="#">Government Interest</a>
APT	<a href="#">Application Type</a>		

Hotovo Internet | Chráněný režim: Zapnuto

Patent Database Search Results: APT/4 AND ICL/A23\$ in US Patent Collection - Windows Internet Explorer

http://patft.uspto.gov/netahtml/PTO/search-adv.htm

USPTO PATENT FULL-TEXT AND IMAGE DATABASE

Searching US Patent Collection...

Results of Search in US Patent Collection db for:  
 (APT/4 AND ICL/A23\$): 2 patents.  
 Hits 1 through 2 out of 2

Jump To

Refine Search

PAT. NO. Title

1 D487.327  Filled dog biscuit

2 D478.705  Pet treat

Hotovo Internet | Chráněný režim: Zapnuto

**APT/4 AND ICL/A23\$**



### PatFT: Patents

*Full-Text from 1976*

[Quick Search](#)  
[Advanced Search](#)  
[Number Search](#)

[View Full-Page Images](#)

[PatFT Help Files](#)  
[PatFT Status, History](#)  
[PatFT Database Contents](#)

[Report Problems](#)

<< BOTH SYSTEMS >>

*The databases are operating normally.*

[Notices & Policies](#)

[How to View Images](#)

[Assignment Database](#)

[Public PAIR](#)

[Searching by Class](#)

[Sequence Listings](#)

[Attorneys and Agents](#)

[Privacy Policy](#)

### AppFT: Applications

*Published since March 2001*

[Quick Search](#)  
[Advanced Search](#)  
[Number Search](#)

[View Full-Page Images](#)

[AppFT Help Files](#)  
[AppFT Status, History](#)

[Report Problems](#)



# Patent Application Information Retrieval (PAIR)

Home Patents Trademarks Other

Patent eBusiness  Patent Application Information Retrieval

- Electronic Filing
- Patent Application Information (PAIR)
- Patent Ownership
- Fees
- Supplemental Resources & Support

Patent Information

Patent Guidance and General Info

- Codes, Rules & Manuals
- Employee & Office Directories
- Resources & Public Notices

Patent Searches

Patent Official Gazette

- Search Patents & Applications
- Search Biological Sequences
- Copies, Products & Services

To continue, you are required to enter the verification code as shown in the box below. This step helps prevent disruptive use by automated programs. **You will need to have both cookies and JavaScript enabled on your browser.** For information on PAIR Usage Policy, visit <http://www.uspto.gov/ebc/index.html>.

his  
123456

Enter the RECAPTCHA text :

[Get another CAPTCHA](#)  
[Get an audio CAPTCHA](#)  
[Help](#)

If you have any question about how to answer the imagery or audio challenge, please visit <http://recaptcha.net>.

*If you need help:*  
Call the Patent Electronic Business Contact (866) 317-9197 (toll free) or e-mail [EBP@uspto.gov](mailto:EBP@uspto.gov) for specific questions about Patent Application Information Retrieval.

Select  
New Case




## Select New Case

\* indicates a required field

You may search for a specific application or conduct a search related to a customer number.

### Search for Application:

Choose type of number:


- Application Number (EXAMPLE: 99999999 or 99/999999) 
- Control Number 
- Patent Number 

Device and method for frying products

**Abstract**

A device for frying food products in fat under vacuum conditions includes a rotating vacuum chamber and a valve in the bottom of the vacuum chamber to a sluice structure, and subsequently is subjected to a

\* Enter number:

<b>Inventors:</b>	Van Der Doe; Martin Hendrik (Krabbendijke, NL)
<b>Assignee:</b>	Terra Chips B.V. (AB Krabbenduke, NL)
<b>Family ID:</b>	19760692
<b>Appl. No.:</b>	10/276,299 
<b>Filed:</b>	November 22, 2002
<b>PCT Filed:</b>	May 23, 2001
<b>PCT No.:</b>	PCT/NL01/00396
<b>371(c)(1),(2),(4) Date:</b>	November 22, 2002
<b>PCT Pub. No.:</b>	WO01/91580
<b>PCT Pub. Date:</b>	December 06, 2001

### Patent eBusiness

- [Electronic Filing](#)
- [Patent Application Information \(PAIR\)](#)
- [Patent Ownership](#)
- [Fees](#)
- [Supplemental Resources & Support](#)

### Patent Information

- [Patent Guidance and General Info](#)
- [Codes, Rules & Manuals](#)
- [Employee & Office Directories](#)
- [Resources & Public Notices](#)

### Patent Searches

- [Patent Official Gazette](#)
- [Search Patents & Applications](#)
- [Search Biological Sequences](#)
- [Copies, Products & Services](#)

### Other

- [Copyrights](#)
- [Trademarks](#)
- [Policy & Law Reports](#)

### Patent Application Information Retrieval

[Order Certified Application As Filed](#)

[Order Certified File Wrapper](#)

[View Order List](#)

10/276,299

DEVICE AND METHOD FOR FRYING PRODUCTS

5245

Select New Case	Application Data	Transaction History	Image File Wrapper	Patent Term Adjustments	Continuity Data	Foreign Priority	Fees	Published Documents	Address & Attorney/Agent	Display References
-----------------	------------------	---------------------	--------------------	-------------------------	-----------------	------------------	------	---------------------	--------------------------	--------------------

### Bibliographic Data

Application Number:	10/276,299	Customer Number:	-
Filing or 371 (c) Date:	11-22-2002	Status:	Patented Case
Application Type:	Utility	Status Date:	07-27-2005
Examiner Name:	BECKER, DREW E	Location:	ELECTRONIC
Group Art Unit:	1761	Location Date:	-
Confirmation Number:	1486	Earliest Publication No:	US 2004-0031396 A1
Attorney Docket Number:	5245	Earliest Publication Date:	02-19-2004
Class / Subclass:	426/438	Patent Number:	6,929,812
First Named Inventor:	Martin Hendrik Van Der Doe , Krabbendijke, (NL) <a href="#">all Inventors</a>	Issue Date of Patent:	08-16-2005
First Named Applicant:	-	AIA (First Inventor to File):	No
Entity Status:	Undiscounted		

Title of Invention: DEVICE AND METHOD FOR FRYING PRODUCTS

#### If you need help:

- Call the Patent Electronic Business Center at (866) 217-9197 (toll free) or e-mail [EBC@uspto.gov](mailto:EBC@uspto.gov) for specific questions about Patent Application Information Retrieval (PAIR).
- Send general questions about USPTO programs to the [USPTO Contact Center \(UCC\)](#).
- If you experience technical difficulties or problems with this application, please report them via e-mail to [Electronic Business Support](#) or call 1 800-786-9199.



### PatFT: Patents

*Full-Text from 1976*

[Quick Search](#)  
[Advanced Search](#)  
[Number Search](#)

[View Full-Page Images](#)

[PatFT Help Files](#)  
[PatFT Status, History](#)  
[PatFT Database Contents](#)

[Report Problems](#)

<< BOTH SYSTEMS >>

*The databases are operating normally.*

[Notices & Policies](#)

[How to View Images](#)

[Assignment Database](#)

[Public PAIR](#)

[Searching by Class](#)

[Sequence Listings](#)

[Attorneys and Agents](#)

[Privacy Policy](#)

### AppFT: Applications

*Published since March 2001*

[Quick Search](#)  
[Advanced Search](#)  
[Number Search](#)

[View Full-Page Images](#)

[AppFT Help Files](#)  
[AppFT Status, History](#)

[Report Problems](#)

# US Published Patent Application Full-Page Images

20040031396

View Publication

Enter a published patent application publication number in format *yyyynnnnnnn* (the left-justified year, plus up to 7 numeric digits, right justified, zero filled).

## Example:

20060000001

You must have a PDF viewer plug-in installed in your Web browser to view and print these images. See "[How to Access and View Full-Page Images](http://appft.uspto.gov/netahtml/PTO/help/images.html)" (<http://appft.uspto.gov/netahtml/PTO/help/images.html>) for more information.

United States Patent and Trademark Office  
Home Site Index Search FAQ Glossary Guides Contacts eBusiness eBiz alerts News Help

Patent #: US20040031396 Section: Front Page 1 of 6 pages Help

US 20040031396A1

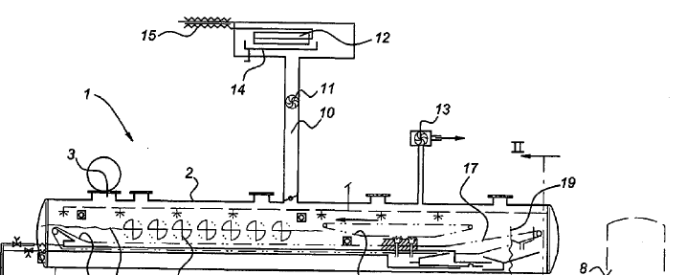
(19) **United States**  
(12) **Patent Application Publication** (10) Pub. No.: **US 2004/0031396 A1**  
Van Der Doc (43) Pub. Date: **Feb. 19, 2004**

(54) **DEVICE AND METHOD FOR FRYING PRODUCTS** (30) **Foreign Application Priority Data**  
May 24, 2000 (WO)..... PCT/NL00/00355

(76) Inventor: **Martin Hendrik Van Der Doe,**  
Krabbendijke (NL)

Correspondence Address: (51) Int. Cl.7 ..... **A23L 1/00; A47J 37/12**  
Charles W Fallow (52) U.S. Cl. .... **99/403; 99/407; 99/472**  
Shoemaker and Mattare  
P O Box 2286  
Arlington, VA 22202-0286 (US) (57) **ABSTRACT**  
A device for frying food products in fat under vacuum conditions includes a rotating vacuum chamber for centrifuging the product after frying. The centrifuged product is directed through a valve in the bottom of the vacuum chamber to a slice structure, and subsequently is subjected to atmospheric pressure.

(21) Appl. No.: **10/276,299**  
(22) PCT Filed: **May 23, 2001**  
(86) PCT No.: **PCT/NL01/00396**



The technical drawing shows a cross-sectional view of a cylindrical device. At the top, there is a motor assembly (15) connected to a vertical shaft (14). The shaft passes through a seal (11) and a valve mechanism (10) into a main chamber (1). Inside the chamber, there are several horizontal blades or rotors (2). A central vertical rod (3) is also present. At the bottom of the chamber, there is a valve (17) and a collection area (19). The entire device is supported by a base (8). Various other components are labeled with numbers 1 through 19.

**Děkuji za pozornost**

zcapkova@upv.cz

**uspto.GOV**

The United States Patent and Trademark Office  
an agency of the Department of Commerce