

AUSTRALIA
Patents Act

CONVENTION

626603

APPLICATION FOR A STANDARD PATENT

The Dow Chemical Company
2030 Dow Center, Abbott Road, Midland, Michigan 48640, UNITED STATES
OF AMERICA

hereby applies for the grant of a standard patent for an invention entitled:
"THERMOPLASTIC MOLDING
COMPOSITION OF AROMATIC POLYCARBONATE, AROMATIC POLYESTER AND COPOLYMER
OF CO/ETHYLENE AND PROCESS FOR PREPARING THE SAME".

which is described in the accompanying complete specification.

Details of basic application(s):-
268,104 UNITED STATES OF AMERICA 7 November 1988

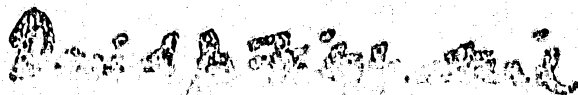
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DATED this SIXTH day of NOVEMBER 1989

PHILLIPS ORMONDE & FITZPATRICK
Attorneys for:
The Dow Chemical Company

By:



Our Ref : 150337
POF Code: 1037/1037

M013657 6 1189



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AUSTRALIA
Patent Declaration

DECLARATION FOR A PATENT APPLICATION

INSTRUCTIONS
a: Insert "Convention"
if applicable
b: Insert FULL name(s)
of applicant(s)

In support of the ^(a) CONVENTION application made by
(b) THE DOW CHEMICAL COMPANY
2030 Dow Center, Abbott Road
Midland, Michigan 48640, U.S.A.
(hereinafter called "applicant(s)") for a patent ^(c) for an
invention entitled ^(d) THERMOPLASTIC MOLDING COMPOSITION AND PROCESS FOR PREPARING THE SAME

c: Insert "of addition"
if applicable
d: Insert TITLE of
invention

e: Insert FULL name(s)
AND address(es) of
deponent(s)
(See heading*)
* * * *

I/We ^(e) Richard G. Waterman, General Patent Counsel
THE DOW CHEMICAL COMPANY
2030 Dow Center, Abbott Road
Midland, Michigan 48640, U.S.A.

do solemnly and sincerely declare as follows:

1. ~~I am/We are the applicant(s).~~
(or, in the case of an application by a body corporate)
1. I am/We are authorized to make this declaration on behalf of the applicant(s).
2. ~~I am/We are the actual inventor(s) of the invention.~~
(or, where the applicant(s) is/are not the actual inventor(s))
2. ^(f)

f: Insert FULL name(s)
AND address(es) of
actual inventor(s)

Hani Farah, 2702 Fieldline, Sugarland, Texas 77479
Chai Jing Chou, 1422 Bluestone Drive, Missouri City, Texas 77459
Don R. Roden, Jr., 851 Marlin, Hitchcock, Texas 77563
all of United States of America respectively

g: Re: How appli-
cant(s) derive(s)
title from actual
inventor(s)
(See heading*)
* * * *

- is/are the actual inventor(s) of the invention and the facts upon which the
applicant(s) is/are entitled to make the application are as follows:
(g) The applicant Company is the assignee of the said invention
from the said actual inventor(s).

(Note: Paragraphs 3 and 4 apply only to Convention applications)

h: Insert country,
filing date, and
basic applicant(s)
for the/or EACII
basic application

3. The basic application(s) for patent or similar protection on which the application is
based is/are identified by country, filing date, and basic applicant(s) as follows:
(h)

U.S. Priority Serial No. 268,104

Filing Date: November 7, 1988

Inventor(s) Names: Hani Farah, Chai Jing Chou and Don R. Roden, Jr.

(k) Insert PLACE of
signing

(l) Insert DATE of
signing

(m) Signature(s) of
deponent(s)

CORP.
SEAL

Declared at ^(k) Midland, Michigan 48640, U.S.A.

Dated ^(l) 11 August 1989

^(m) THE DOW CHEMICAL COMPANY

By: 

RICHARD G. WATERMAN
General Patent Counsel

To: The Commissioner of Patents

Agent: Phillips, Ormonde & Fitzpatrick

(12) PATENT ABRIDGMENT (11) Document No. AU-B-44454/89
(19) AUSTRALIAN PATENT OFFICE (10) Acceptance No. 626603

(54) Title
POLYCARBONATE MOLDING COMPOSITION

(51)⁴ International Patent Classification(s)
C08L 069/00 C08L 067/02 C08L 073/00

(21) Application No. : 44454/89 (22) Application Date : 06.11.89

(30) Priority Data

(31) Number (32) Date (33) Country
268104 07.11.88 US UNITED STATES OF AMERICA

(43) Publication Date : 10.05.90

(44) Publication Date of Accepted Application : 06.08.92

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(56) Prior Art Documents
AU 44453/89 C08L 069/00 073/00
US 3248359
AU 577034 22251/83 C08L 069/00

(57)

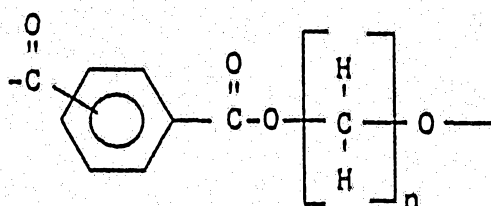
This invention relates generally to thermoplastic molding compositions comprising polycarbonates and, more particularly, to environmental stress failure resistant and impact resistant polymer blends comprising a polycarbonate, a polyester and a copolymer of ethylene and carbon monoxide.

CLAIM

1. A thermoplastic molding composition, comprising:

- A. an aromatic polycarbonate;
- B. an aromatic polyester; and
- C. a copolymer of ethylene and carbon monoxide.

4. A thermoplastic molding composition as claimed in Claim 1, wherein the aromatic polyester is characterized by repeated units corresponding to the general formula:



wherein n is selected from the numbers 2 through 6.

12. A process for preparing a thermoplastic molding composition which comprises blending;

- A. an aromatic polycarbonate;
 - B. an aromatic polyester; and
 - C. a copolymer of ethylene and carbon monoxide;
- and subsequently melt-mixing A, B and C.

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Patents Act

626603

COMPLETE SPECIFICATION
(ORIGINAL)

Application Number: Class Int. Class
Lodged:

Complete Specification Lodged:
Accepted:
Published:

Priority

Related Art:

Applicant(s):

The Dow Chemical Company
2030 Dow Center, Abbott Road, Midland, Michigan 48640, UNITED STATES
OF AMERICA

Address for Service is:

PHILLIPS ORMONDE & FITZPATRICK
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Complete Specification for the invention entitled: "THERMOPLASTIC MOLDING
COMPOSITION OF AROMATIC POLYCARBONATE, AROMATIC POLYESTER AND COPOLYMER
OF CO/ETHYLENE AND PROCESS FOR PREPARING THE SAME".

Our Ref : 150337
POF Code: 1037/1037

The following statement is a full description of this invention, including
the best method of performing it known to applicant(s):



"THERMOPLASTIC MOLDING
COMPOSITION OF AROMATIC POLYCARBONATE, AROMATIC POLYESTER AND COPOLYMER
OF CO/ETHYLENE AND PROCESS FOR PREPARING THE SAME".

5 This invention relates generally to
thermoplastic molding compositions comprising poly-
carbonates and, more particularly, to environmental
stress failure resistant and impact resistant polymer
blends comprising a polycarbonate, a polyester and a
copolymer of ethylene and carbon monoxide.

10 Polycarbonates are well-known commercially
available resinous materials having a variety of
applications. They are typically prepared by the
reaction of dihydroxy compounds with a carbonate
precursor, such as phosgene, in the presence of a
15 catalyst. Methods of direct phosgenation, interfacial
condensation and transesterification, for the
preparation of polycarbonates, are described in detail
in "The Chemistry and Physics of Polycarbonates", by
H. Schnell, John Wiley & Co., N.Y., 1964.

20 Polycarbonates are high temperature, high
performance engineering thermoplastics having a
combination of good thermal and mechanical properties,
25 especially when prepared from one or more aromatic



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diols. The blending with polycarbonates of additional compounds such as, for example, other thermoplastic resins and copolymer rubber compounds is commonly practiced in order to improve one or more properties of the homopolymer polycarbonate.

The applications for homopolycarbonates and blends of polycarbonates with other thermoplastic resinous compounds as engineering materials are limited because they generally exhibit severe environmental stress failure. By environmental stress failure is meant surface crazing or cracking, or disintegration of the molded piece resulting from its contact with organic solvents while under stress, such as may occur for example when solvents are used to clean or degrease stressed parts fabricated from polycarbonates or polycarbonate blends.

U.S. Patent No. 3,431,224 discloses a blend of a polycarbonate and a polyolefin such as polyethylene or an olefin copolymer such as ethylene/propylene, in order to improve the environmental stress failure resistance of the homopolycarbonate. U.S. Patent No. 4,180,494 discloses the use of a butadiene-based core-shell copolymer for improving the environmental stress failure resistance of a blend of polycarbonate and polyester resins.

Various other additives are disclosed in the art for modifying the properties of polycarbonate/polyester blends; U.S. Patent No. 4,476,274 discloses polyethylene and glass fibers for improved impact resistance; U.S. Patents Nos. 3,780,139 and 4,271,063 disclose a terpolymer of ethylene, carbon monoxide and a third component such as vinyl acetate for

improved strength; U.S. Patent No. 4,639,481 discloses polyethylene or a polyolefin copolymer for improved impact resistance.

5 The present invention is directed toward a novel polymer blend, comprising an aromatic polycarbonate, an aromatic polyester, and a copolymer of ethylene and carbon monoxide. The blend surprisingly is highly impact resistant, and is likewise resistant to environmental stress failure.

10 Accordingly the present invention provides a thermoplastic molding composition, comprising:

- 15 A. an aromatic polycarbonate;
- B. an aromatic polyester, and
- C. a copolymer of ethylene and carbon monoxide.

20 The present invention also provides a process for preparing a thermoplastic molding composition which comprises blending:

- 25 A. an aromatic polycarbonate;
- B. an aromatic polyester; and
- C. a copolymer of ethylene and carbon monoxide; and subsequently melt-mixing A, B and C.

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Improved strength; U.S. Patent No. 4,639,481 discloses polyethylene or a polyolefin copolymer for improved impact resistance.

5 The present invention is directed toward a novel polymer blend, comprising an aromatic polycarbonate, an aromatic polyester, and a copolymer of ethylene and carbon monoxide. The blend surprisingly is highly impact resistant, and is likewise resistant to
10 environmental stress failure.

15 The polymer blends of the present invention exhibit high impact resistance, chemical resistance, temperature stability, and excellent thermoplastic engineering properties, making them particularly suitable for producing molded plastic components for the automotive and electrical housing manufacturing industries.

20 The aromatic polycarbonates suitable for use in the present invention are produced by any of the conventional processes known in the art for the manufacture of polycarbonates. Generally, aromatic polycarbonates are prepared by reacting an aromatic
25 dihydric phenol with a carbonate precursor, such as for example phosgene, a haloformate or a carbonate ester.

30 A preferred method for preparing the aromatic polycarbonates suitable for use in the present invention involves the use of a carbonyl halide, such as phosgene, as the carbonate precursor. This method involves passing phosgene gas into a reaction mixture containing an activated dihydric phenol, or a nonactivated dihydric
35 phenol and an acid acceptor such as, for example pyridine, dimethyl aniline and quinoline. The acid



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acceptor may be used undiluted or diluted with inert organic solvents, such as methylene chloride, chlorobenzene or 1,2-dichloroethane. Tertiary amines are advantageous since they are good solvents as well as acid acceptors during the reaction.

The temperature at which the carbonyl halide reaction proceeds may vary from below 0°C to 100°C. The reaction proceeds satisfactorily at temperatures from room temperature to 50°C. Since the reaction is exothermic, the rate of phosgene addition may be used to control the temperature of the reaction. The amount of phosgene required will generally depend upon the amount of dihydric phenols present. Generally speaking, one mole of phosgene will react with one mole of dihydric phenol to form the polycarbonate and two moles of HCl. The HCl is in turn taken up by the acid acceptor.

Another method for preparing the aromatic polycarbonates useful in the present invention comprises adding phosgene to an alkaline aqueous suspension of dihydric phenols. This is preferably done in the presence of inert solvents such as, for example, methylene chloride and 1,2-dichloroethane. Quaternary ammonium compounds may be employed to catalyze the reaction.

Yet another method for preparing such aromatic polycarbonates involves the phosgenation of an agitated suspension of an anhydrous alkali salt of an aryl diol in a nonaqueous medium such as benzene, chlorobenzene or toluene. The reaction is illustrated by the addition of phosgene to a slurry of the sodium salt of, for example,

Bisphenol A in an inert polymer solvent such as chlorobenzene.

5 Generally speaking, a haloformate such as the bis-haloformate of Bisphenol A may be used in place of phosgene as the carbonate precursor in any of the methods described above.

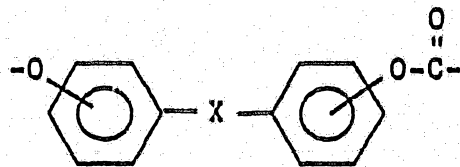
10 When a carbonate ester is used as the carbonate precursor in the polycarbonate forming reaction, the materials are reacted at temperatures in excess of 100°C, for times varying from 1 to 15 hours. Under such conditions, ester interchange occurs between the carbonate ester and the dihydric phenol used. The ester
15 interchange is advantageously consummated at reduced pressures on the order of from 10 to 100 millimeters of mercury (1.3 to 13 Pa), preferably in an inert atmosphere such as nitrogen or argon.

20 Although the polymer forming reaction may be conducted in the absence of a catalyst, one may, if desired, employ a typical ester exchange catalyst, such as metallic lithium, potassium, calcium or magnesium. The amount of such catalyst, if used, is usually small,
25 ranging from 0.001 percent to 0.1 percent, based on the weight of the dihydric phenols employed.

30 In the solution methods of preparation, the aromatic polycarbonate emerges from the reaction in either a true or pseudo solution depending on whether an aqueous base or pyridine is used as an acid acceptor. The copolymer may be precipitated from the solution by adding a polymer nonsolvent, such as heptane or
35 isopropanol. Alternatively, the polymer solution may be

heated, typically under reduced pressure, to evaporate the solvent.

A preferred aromatic polycarbonate is characterized by repeated units corresponding to the general formula:



wherein X is a divalent C₁-C₁₅ hydrocarbon radical, a single bond, -O-, -S-, -S₂-, -SO-, -SO₂-, or -CO-. Each aromatic ring may additionally contain 1 or 2 substituents such as C₁-C₄ alkyl hydrocarbon radicals or halo radicals. A most preferred aromatic polycarbonate is prepared from 2,2-bis-(4-hydroxyphenyl)-propane (Bisphenol A).

The aforementioned methods of preparing aromatic polycarbonates are more fully set forth in U.S. Patents 2,999,846, 3,028,365, 3,148,172, 3,153,008, 3,248,414, 3,271,367, and 4,452,968.

Also included in the term aromatic polycarbonate are the polycarbonate/polyester copolymers of the types disclosed in U.S. Patents Nos. 3,169,121, 4,105,633, 4,156,069, 4,260,731 and 4,287,787, as well as mixtures of polycarbonates and polycarbonate/polyester copolymers.

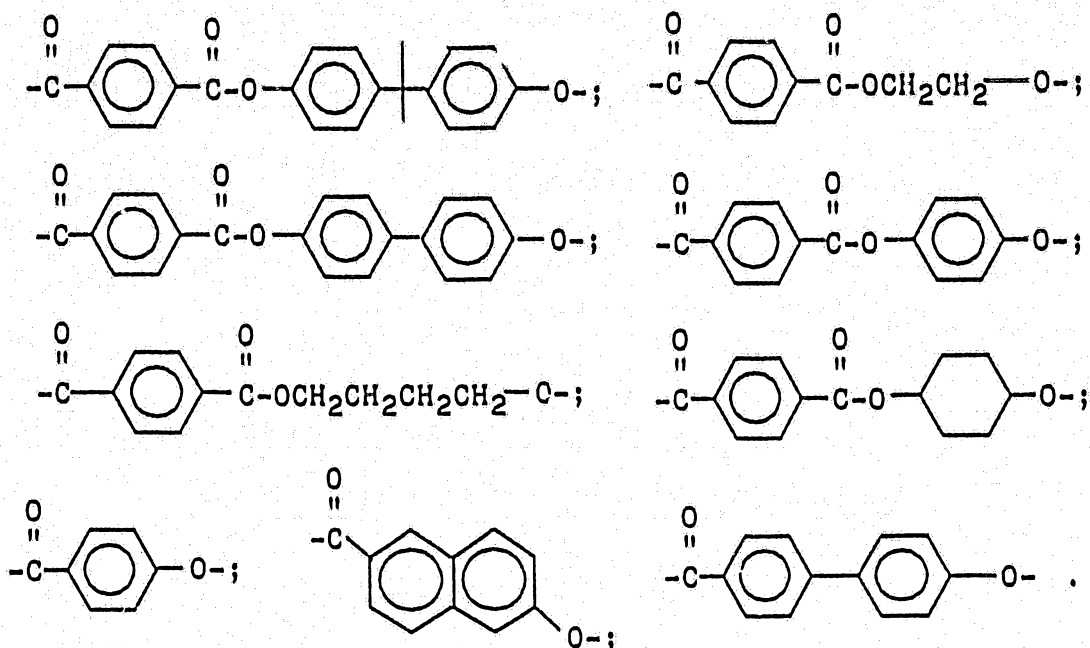
The aromatic polyesters suitable for use according to the present invention, preferably may be generally prepared by condensing aromatic dicarboxylic acids with



diols, or by condensing precursors which contain both an alcohol or phenol and a carboxylic acid. Suitable aromatic dicarboxylic acids include, for example, terephthalic acid, isophthalic acid, naphthalene-
5 dicarboxylic acid, diphenyletherdicarboxylic acid, diphenyldicarboxylic acid, diphenylsulfonedicarboxylic acid and diphenoxyethanedicarboxylic acid. Examples of suitable aromatic diols are hydroquinone, resorcinol,
10 2,2-bis-(4-hydroxyphenyl)propane, bis-(4-hydroxyphenyl)-methane, 4,4'-thiodiphenol, bis-(4-hydroxyphenyl)-sulfone, 4,4'-oxydiphenyl, 4,4'-dihydroxybiphenyl, and dihydroxynaphthalenes. The aliphatic diols suitable for preparation of the aromatic polyesters include, for
15 example, ethylene glycol, 1,3-propylene glycol, 1,4-butanediol, 1,5-pentanediol, 1,6-hexanediol and cyclohexane dimethylol. Examples of precursors which contain both an alcohol and a carboxylic acid are
20 4-hydroxybenzoic acid and 2-hydroxy-6-naphthoic acid.

Polyesters may be prepared using any of the several well known methods such as, for example, by the reaction of the acid chloride of a carboxylic acid with an alcohol or phenol in the presence of a base;
25 dehydration of an acid and alcohol or phenol through physical or chemical means; reaction of the ester derivative of a carboxylic acid (such as a methyl or phenyl ester) with an alcohol or phenol; or reaction of a carboxylic acid with a derivative (such as an acetate)
30 of an alcohol or phenol.

Contemplated equivalent polyesters, having the same operability and utility, may contain for example
35 the following repeated mer units:

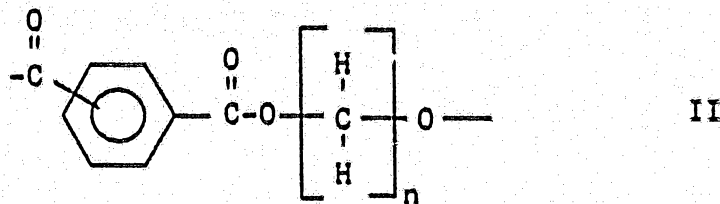


By the term polyester, as used in the present invention, is also contemplated copolyesters, which preferably may be prepared by cocondensing one or more aromatic dicarboxylic acids with one or more diols. Also contemplated are liquid crystalline polyesters derived from mixtures of 4-hydroxybenzoic acid and 2-hydroxy-6-naphthoic acid; or mixtures of terephthalic acid, 4-hydroxybenzoic and ethylene glycol; or mixtures of terephthalic acid, 4-hydroxybenzoic acid, and 4,4'-dihydroxybiphenyl.

A preferred polyester is characterized by repeated units corresponding to the general formula:



5



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wherein n is selected from the numbers 2 through 6. A most preferred aromatic polyester is polyethylene terephthalate.

15

Specific methods of preparing aromatic polyesters and copolyesters are more fully set forth in U.S. Patents Nos. 2,465,319 and 3,047,539.

20

The olefin/carbon monoxide copolymers of the present invention may be prepared by polymerizing ethylene with carbon monoxide, at an elevated temperature and pressure, in the presence of a catalyst such as a peroxy compound or azo compound. Specific procedures for preparing the copolymers are more fully set forth in U.S. Patents Nos. 2,495,285, 2,541,987, 4,024,325 and 4,024,326. The amount of carbon monoxide in the copolymer may be from 0.1 percent to 50 percent of the total weight of the copolymer; preferably it is from 2 percent to 15 percent by weight.

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The polymer blend of the present invention comprises from 5 percent to 95 percent, preferably from 40 percent to 85 percent, of an aromatic polycarbonate; from 60 percent to 2 percent, preferably from 40 percent to 3 percent, of an aromatic polyester; and from 0.1 to 40 percent, preferably 1 percent to 25 percent, most preferably from 2 percent to 15 percent, of an

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The polymer blend of the present invention preferably comprises from 5 percent to 95 percent, more preferably from 40 percent to 85 percent, of an aromatic polycarbonate; preferably from 60 percent to 2 percent, more preferably from 40 percent to 3 percent, of an aromatic polyester; and preferably from 0.1 to 40 percent, more preferably 1 percent to 25 percent, most preferably from 2 percent to 15 percent, of an

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ethylene/carbon monoxide copolymer. The recited percentages are in relation to the total weight of the resinous blend. The components may be mixed in any order. by the use of any conventional mixing apparatus.

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The polymer blends of polycarbonate, polyester and ethylene/carbon monoxide copolymer may obviously contain additional elastomeric impact modifiers such as, for example, acrylonitrile-butadiene-styrene copolymers (ABS copolymers), methylmethacrylate-butadiene-styrene copolymers (MBS rubbers), hydrogenated styrene-butadiene copolymers, functionalized EPDM copolymers, acrylic latexes, polybutadiene, polyisoprene and polybutene. Surprisingly, these impact modifiers are better tougheners for polycarbonate/polyester blends containing the ethylene/carbon monoxide copolymer than for the same polycarbonate/polyester blends containing known polyolefins such as, for example, polyethylene.

20

The polymer blends of the present invention may furthermore contain conventional thermoplastic polymer additives such as, for example, fillers, thermal stabilizers, dyes, flame retarding agents, reinforcing agents, softeners, mold-release agents, seed-forming agents, pigments, plasticizers, antistatic agents, ultraviolet radiation absorbers and lubricants, in conventional amounts generally not exceeding 50 percent of the total weight.

30

The invention is more easily comprehended by reference to specific embodiments which are representative of the invention. It must be understood, however, that the specific embodiments are provided only for the purposes of illustration and understanding, and that the invention may be practiced otherwise than as

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specifically illustrated and described without departing from its spirit and scope.

Examples 1-8

5 Dry blends comprising polycarbonate and polyester resins and ethylene/carbon monoxide copolymer were prepared in the proportions described in Table I (as were comparison compositions), and subsequently
10 melt-mixed in a co-rotating twin screw extruder. The resulting polymer blend strands were quenched and pelletized, and the pellets injection molded into test specimens whose mechanical properties are described in
15 Tables II and III.

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Table I

COMPOSITIONS TESTED, WEIGHT %

	<u>Polycarbonate</u> ¹	<u>Polyester</u> ²	<u>E/CO Copolymer</u> ³	<u>Polyethylene</u> ⁴	<u>Impact Modifier</u> ⁵
Example 1	70	3	27		
Comparison 1	70	3		27	
Example 2	70	6	24		
Comparison 2	70	7		24	
Example 3	70	10	20		
Comparison 3	70	10		20	
Example 4	70	15	15		
Comparison 4	70	15		15	
Example 5	62	20	15		3
Example 6	57	20	15		8
Comparison 5	70	20			10
Comparison 6	62	20		15	3
Comparison 7	57	20		15	8
Example 7	73	20	7		
Example 8	65	20	7		8
Comparison 8	73	20		7	
Comparison 9	65	20		7	8
Comparison 10	70	30			

¹ CALIBRE® 300-10, aromatic polycarbonate manufactured by The Dow Chemical Company.

² Polyethylene terephthalate aromatic polyester.

³ Copolymer of 90% ethylene and 10% carbon monoxide.

⁴ Low density polyethylene.

⁵ METABLEND® C-223, MBS rubber manufactured by M&T Chemical Co.

Table II

MECHANICAL PROPERTIES

	DTUL ¹ °F @ 264 lb (°C at 120 kg)	Flex Mod ² psi (GPa)	Izod ³ ft-lb/in (J/m) @ 73°F (23°C)	% Elongation Before Solvent ⁴	% Elongation After Solvent ⁵
Example 1	264 (130)	220,000 (1.5)	15.7 (840)	86	86
Comparison 1	241 (115)	240,000 (1.7)	12.8 (680)	15	15
Example 2	245 (120)	230,000 (1.6)	12.1 (645)	87	89
Comparison 2	238 (114)	250,000 (1.7)	13.1 (700)	19	19
Example 3	233 (110)	260,000 (1.8)	8.5 (450)	91	63
Comparison 3	246 (120)	260,000 (1.8)	9.1 (485)	5	15
Example 4	240 (115)	270,000 (1.9)	7.2 (385)	102	39
Comparison 4	238 (114)	270,000 (1.9)	7.7 (400)	13	6
Example 5	225 (107)	260,000 (1.8)	2.6 (140)	80	66
Example 6	220 (104)	260,000 (1.8)	7.0 (375)	66	60
Comparison 5	246 (120)	290,000 (2.0)	13.6 (725)	93	2
Comparison 6	226 (108)	260,000 (1.8)	3.9 (210)	15	17
Comparison 7	218 (103)	260,000 (1.8)	4.7 (250)	16	13
Comparison 10	248 (120)	280,000 (1.9)	1.8 (95)	119	2

¹ Deflection Temperature Under Load ASTM D 648.

² Flexural Modulus, ASTM D 790.

³ Izod impact, specimens having 10 mil (0.254 mm) notch, ASTM D 256.

⁴ Tensile % elongation at break, ASTM D 638.

⁵ Tensile % elongation at break, after 5 minutes under 0.7% strain in 60/40 weight % isooctane/toluene, ASTM D 638.

Table III
MECHANICAL PROPERTIES

5	Falling Dart ¹ Impact, Passes <u>in-lb (m-kg)</u>	Falling Dart ¹ Impact, Fails <u>in-lb (m-kg)</u>
Example 7	448 (5.1)	464 (5.3)
Example 8	288 (3.3)	304 (3.5)
10 Comparison 8	384 (4.4)	400 (4.6)
Comparison 9	232 (2.7)	240 (2.8)

1 Test conducted by dropping 16 lb (7 kg) weight over the center of a 6.5 inch (165 mm) by 2.5 inch (63.5 mm) injection molded plaque. The load falls freely inside a slotted vertical guide tube on the top of a round-nose punch having a 0.500 inch (12.7 mm) diameter point. The specimen is placed on an aluminum cast base with a 0.640 inch (16.3 mm) hole to accept the punch after it penetrates the sample. The instrument is a Pacific Scientific model #IG-1120. The sample fails if it shows a crack on the tension side.

The percent elongation at break values for polymer compositions containing the copolymer of ethylene and carbon monoxide were superior to those for corresponding formulations utilizing polyethylene. The retention of properties after treatment in a synthetic gasoline was reasonable up to about 15 percent polyester content. More delamination was observed for blends containing polyethylene than those containing the ethylene/carbon monoxide copolymer. Furthermore, the impact modifier was surprisingly a more efficient toughener for the blends containing the ethylene/carbon monoxide copolymer than for blends containing

polyethylene, as demonstrated by the notched Izod impact and falling dart impact results.

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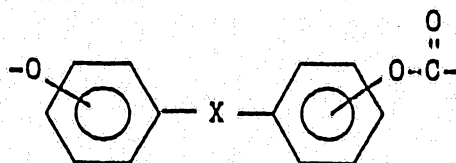
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The claims defining the invention are as follows:

1. A thermoplastic molding composition, comprising:

- A. an aromatic polycarbonate;
- B. an aromatic polyester; and
- C. a copolymer of ethylene and carbon monoxide.

2. A thermoplastic molding composition as claimed in Claim 1, wherein the aromatic polycarbonate is characterized by repeated units corresponding to the general formula:

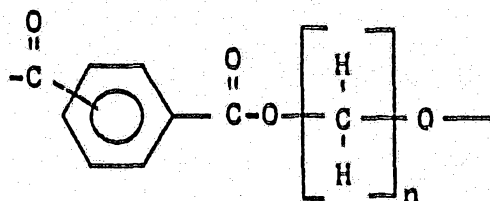


wherein X is a divalent C₁-C₁₅ hydrocarbon radical, a single bond, -O-, -S-, -S₂-, -SO-, -SO₂-, or -CO-, and further wherein each aromatic ring may optionally

contain 1 or 2 C₁-C₄ alkyl hydrocarbon radical or halo radical substituents.

5 3. A thermoplastic molding composition as claimed in Claim 2, wherein the aromatic polycarbonate is prepared from Bisphenol A.

10 4. A thermoplastic molding composition as claimed in Claim 1, wherein the aromatic polyester is characterized by repeated units corresponding to the general formula:



20 wherein n is selected from the numbers 2 through 6.

25 5. A thermoplastic molding composition as claimed in Claim 4, wherein the aromatic polyester is polyethylene terephthalate.

30 6. A thermoplastic molding composition as claimed in Claim 1, wherein the copolymer of ethylene and carbon monoxide comprises from 0.1 percent to 50 percent or ~~from 2 percent to 15 percent~~ by weight carbon monoxide.

~~7. A thermoplastic molding composition as claimed in Claim 1, which comprises from 5 percent to 95 percent by weight of aromatic polycarbonate based upon the total weight of polymers.~~



7. A thermoplastic molding composition as claimed in Claim 6, wherein the copolymer of ethylene and carbon monoxide comprises from 2 percent to 15 percent by weight carbon monoxide.

8. A thermoplastic molding composition as claimed in Claim 1, which comprises from 5 percent to 95 percent by weight of aromatic polycarbonate based upon the total weight of polymers.

9. A thermoplastic molding composition as claimed in Claim 7, which comprises from 40 percent to 85 percent of aromatic polycarbonate, based upon the total weight of polymers.

10. A thermoplastic molding composition as claimed in Claim 8, which comprises from 40 percent to 3 percent of aromatic polyester, based upon the total weight of polymers and from 0.1 percent to 40 percent of a copolymer of ethylene and carbon monoxide, based upon the total weight of polymers.

11. A thermoplastic molding composition as claimed in Claim 1, further comprising an elastomeric impact modifier selected from acrylonitrile-butadiene-styrene copolymers, methylmethacrylate-butadiene-styrene copolymers, hydrogenated styrene-butadiene copolymers, functionalized EPDM copolymers, acrylic latexes, polybutadiene, polyisoprene and polybutene.

12. A process for preparing a thermoplastic molding composition which comprises blending:

- A. an aromatic polycarbonate;
 - B. an aromatic polyester; and
 - C. a copolymer of ethylene and carbon monoxide;
- and subsequently melt-mixing A, B and C.

13. A thermoplastic molding composition as claimed in Claim 1 substantially as hereinbefore described with reference to any one of the Examples.



14. A process as claimed in Claim 12 substantially as hereinbefore described with reference to any one of the Examples.

5 DATED: 7 May 1992

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